

Growth and government economic policies in Brazil

**A Study on Aggregate Income Developments
(1940-1980)**

Wilson Do Nascimento Barbosa

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av

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Abstract This study makes use of regression analysis in order to compare the effects of the two dominant economic models of industrialization, as currently defined and generalized from the policy practices occurring in the recent Brazilian economic history (1940-1980): (a) the import-substitution type of industrialization (1940-1964) and its related mixes, and (b) the industrialization-cum-exports growth model, which is considered as prevailing in the period 1964-1980.

Both periods presented the common feature of the State economic action, primarily as a credit creator and gradually as an investor, an entrepreneur and the main single market force. The State developed policies in order to maximize economic growth. The first period (1940-1964) was characterized by a policy of overall growth, which benefitted both the traditional industries and the formation of a heavy industries sector. In the second period (1964-1980), the Public action was orientated to achieve a more rapid growth, through a process of income concentration and growth of durables-producing branches. The purposeful use, by the Government authorities, of the structural imbalances in the Brazilian foreign trade, in the rural and non-rural sectors, in the economic branches, etc, as a source of reallocative expansion is characterized through the functional analyses of the disposable income, foreign debt, savings and consumption mechanisms. The study concludes that the absence of anticyclical measures and of adequate fiscal and exchange policies are visible causes of the existing distortions.

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IN BRAZIL

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The author.

Lund, september 1984.

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1. INTRODUCTION.

Brazil is divided into five major regions which comprise 32 great geo-economic areas. These major regions are divided into 27 political units, 22 of which are states and 4 of which are federal territories. The 27th is the Federal District, seat of the Central Government, where the capital of the country is situated, Brasília City. The Northern region comprises 42.1 per cent of the total area of the country and therein are the two largest states: Amazonas (1,564 thousand of square km) and Pará (1,248 thousand of square km). The Northeastern region accounts for ten political units (three of them with more than 250 thousand km² and the rest with less than 565 thousand km²). This region covers 18.2 per cent of the total area of the country.

The Southeastern region extends over 5 states and comprises 10.9 per cent of the total area. Minas Gerais is its largest state with 6.9 per cent of the country's area. The Southern region is made of three political units and comprises 6.8 per cent of the country's area. Where, the state of Rio Grande do Sul occupies 3.3 per cent of the national area. Below, is listed the political units of the country:

<u>I. Northern region</u>	<u>Capital (city)</u>
1. Roraima	Boa Vista
2. Acre	Rio Branco
3. Amazonas	Manaus
4. Rorônia	Porto Velho
5. Pará	Belém
6. Amapá	Macapá
<u>II. Northeastern region</u>	
7. Maranhão	São Luís
8. Piauí	Teresina
9. Ceará	Fortaleza
10. Rio Grande do Norte	Natal
11. Paraíba	João Pessoa
12. Pernambuco	Recife
13. Alagoas	Maceió
14. Sergipe	Aracaju
15. Bahia	Salvador
16. Fernando de Noronha	—
<u>III. Southeastern region</u>	
17. Espírito Santo	Vitória
18. Minas Gerais	Belo Horizonte
19. Rio de Janeiro	Rio de Janeiro
20. São Paulo	Sao Paulo
<u>IV. West-Central region</u>	
21. Mato Grosso do Sul	Campo Grande
22. Mato Grosso do Norte	Cuiabá
23. Goiás	Goiania
24. Distrito Federal	Brasília
<u>V. Southern region</u>	
25. Paraná	Curitiba
26. Santa Catarina	Florianópolis
27. Rio Grande do Sul	Porto Alegre

Brazil is a Republic, but her federative character has in practice disappeared. The so-called Federal Government, led by a President periodically elected by indirect vote, is more oriented to centralist views. Thus, the political power has in fact been concentrated in the Central Government and in the hands of a few men. Most decisions are made by the President and his direct staff.

1.1 Objectives

A) The Period of Research.

The period 1940—1980 is generally considered as characteristic of more sustained and accelerated industrialization. In fact, this was both the result of the political changes related to the 1930's Revolution, as well as of the new conditions for the market of primary commodities which appeared with basis in the 1929 world crisis. Thus, this period constitutes of the phase which comprehended the modern industrialization in the country.

B) The Importance of the State.

This period of recent industrialization is also characterized by a continuous presence of the State in the economic life. This presence was primarily as a consumer and employer, since the period of the Independence, while in this recent period it assumes again also a role as producer. The primitive role of the State as producer had been performed in the early 1800s, when the Portuguese Crown established in Brazil industries of military and strategic interest, while the recent producer role of the State is related to policies for more rapid industrialization.

C) The Main Objective.

The main objective of this work is to provide a synthetic view on the evolution of the State policies to control the different junctures and promoting growth. In order to make this picture clear, we make the analysis of long-run time series, as well as a tentative explanation of the inherent mechanisms of the Brazilian economy in historical terms. Thus, we combine qualitative and quantitative information, which are supposed to co-operate towards our objective.

Seeking a general view of the Public economic policies, we included only that information which was necessary to achieve a clear survey. We think that it is exactly an overall view that has been lacking recently. Our intention is to provide a clear picture of the changes as well as the permanent elements of policy-making in the history of Brazil between 1940 and 1980.

Apart from the effort to clarify the real nature of permanent component of a policy, the first attempt is also made to study the behaviour of these elements through an empirical analysis.

D) Hypotheses.

The following hypotheses are relevant as a starting point in the research of this period (1940-1980):

(a) The State should have transformed into the main economic agent in the market.

(b) The State should have financed the industrialization with the gains of foreign trade, due to the exchange resources produced by the export of primary commodities.

(c) The agricultural sector should have functioned in the period as a primitive market.

(d) The Public Authorities should have manipulated the changes in the relative prices in order to raise resources to finance industrialization.

(e) The State should have orientated the industrialization process toward preferential development of "durables", due to pressures of aggregate demand.

(f) Excessive effects of liberalization policies should have reduced the capacity of the domestic economy to adjust to international developments.

Let us detail somewhat the circumstances of the above hypotheses:

(a) The State has become the main economic agent in the market. - Due to the fact that the coffee sector collapsed and no other favourable development was available as primary activities, the State was allowed to make a large intervention in the market, an intervention which first sustained the agricultural prices and later produced a State-controlled sector in the economy. Through this increased participation, the State has gradually become the initiator of the main developmental projects, acting in fact as the force which orientates reallocations in the Brazilian market;

(b) The State financed industrialization with the gains of foreign exchange produced by the export of primary commodities. - While a considerable expansion in credit was the main tool that the Government developed in this historical period for stimulating economic growth, the important aspect of this credit mechanism was the use of the gains from the primary exports to finance urban development, and especially industrialization. From this point of view, exchange policies, devaluation and inflation were - as far as possible - used to stimulate efficiency and promote reallocations in favour of industrialisation;

(c) Due to the condition under (b), the agricultural sector remained a primitive market during this period. - While in colonial or semi-colonial economy agriculture and its primary activities are always primitive markets, in this period in Brazil new elements were added to this condition. The land colonization moved into virgin lands; new acreage was continuously added to the previous arable land, labour continued to be used as a relatively cheap factor with efficient applicability and low productivity because improvements on the capital side were avoided, resulting in relatively low output per unit of land but allowing adequate profits. This drive was possible due to a relative abundance of land and labour and a paucity of capital resources;

(d) The Public Authorities manipulated the changes in the relative prices in order to finance industrialization. - While this was the preferred policy in the period characterized by import-substitutive industrialization, the Government used this mechanism during all the period from 1940-80. Through the control of imports,

credit and exchange mechanisms, the Government was in a position which allowed it to interfere in the changes of the relative prices, orienting this mechanism to support industrialization;

(e) Due to the mounting pressures of consumption and investment demands, the Government re-orientated the Public policies toward preferential development of durables. The post-1964 policies opted for further income concentration and expansion of durables, since a broader distribution of wealth was not compatible with more rapid growth. The Government Authorities seems to have tentatively answered the question: How to produce a restrictive policy which would kick interest rates upward and improve the trade balance, while reducing real wages and domestic investment? The adequate mix have combined: (1) reduced domestic consumption of traditional items, for stimulated exports; (2) accumulated unused capacity; (3) extended unemployment; (4) devaluations; (5) additional income concentration; (6) expansion of durables and "luxury production". While the roots for this change in policies can be attributed to the rapid process of industrialization, the elimination of a free interplay in the labour market contributed in special degree to these last developments in the post-1964 policies.

(f) Excess liberalization reduced the capacity of the domestic economy to absorb the impact of international events and contributed to high domestic costs of capital and output in relation to the prevailing standards abroad. - The Government in the implementation of the post-1964 policies probably underestimated the role of the State as a direct economic agent in the previous period and intended to finance - many times with external savings - a more free developmental course based on the interplay of international corporations and the domestic Private sector. In order to finance this shift, a particular role was now attributed to increase exports, which notwithstanding its expansion, revealed itself incapable of paying for either the imports or for the costs of capital movement. The cause of this failure seems to be the excess liberalization promoted by the Brazilian Public Authorities, since these policies, especially the devaluations, exceeded the absorptive capacity of the domestic economy, which therefore could not follow the expansive costs for foreign capital and other inputs. While the "oil crisis" was a component factor of these unfavourable developments, the main hindrance seems to have been the erroneous economic policies which resulted from excess liberalization.

1.2. Periodization

The Brazilian State entered into the process of industrialization apparently by a gradual process. Under the conditions created by the crisis of 1929, the Government was compelled to extend the Public action to control or attempted to control the worsened position of the Brazilian foreign trade, the exchange market, the excess of exportable crops, etc. These imbalances were aggravated by a general unemployment and an excess of unused resources in the domestic economy.

Thus, the Government Authorities firstly implemented a policy attempting

to balance the market of agricultural and exportable commodities and then gradually faced the problems of credit, unused capacity, etc. This gradual shifting conducted the Public Authorities through a policy of industrialization, a policy which soon attributed an important role to the State.

Towns in the modern period emerged through the first steps of a spontaneous process of industrialization. In this case, the industrialization process promoted changes in the employment structure and, consequently, in the functioning of previously existing towns, which I could say, supports the Brunhes line of argumentation on modern urban revolution. The first industrial privately-owned plants appeared in Rio de Janeiro (1830-1840) and in São Paulo (1860-1870). Thence forward industrialization and modernization advanced step by step, until the 1930's period of recovery and the "take-off" characteristic of the heavy industrialization of the late 30's and the 1940's.

A) Market Developments.

During the recent period of the industrialization (1940-1980), areas of more advanced market relations were established, in spite of a persistent degree of backwardness, increasing income concentration and growing regional inequality. The main observable structural change was the shift from agricultural and primary activities to urban ones. The tertiary sector, which still comprises the main reserves of primitive markets, showed the biggest expansion. As a result, a modern dualism developed in connection with a rapid shift from rural to urban population.

It goes without saying that this relatively rapid shift from a traditional agrarian structure to an urban environment has not developed smoothly to the degree of industrialization. Insufficient resources in capital and labour skills were barriers to a smooth change.

The previous growth of the urban population contributed to modernization and also to the industrial changes of the 1930's and 1940's. At that time the industrialization effort was of a substitutive nature and highly labourintensive, where a low level of management efficiency demanded relatively larger labour supplies in the urban industrial services and in plants than for the type of industrialization lately required. Nevertheless, industrial capital formation was mainly conducted in the 1960's and 1970's through oligopolistic and internationalized features, which reduced the demand for labour and asked for permanent adjustment to international developments in prices.

The development of an oligopolistic structure in the modern sector can be traced back to the 1950's, when the adoption of more capital-intensive equipment and the creation of legal market reserves for a small group of enterprises assured the internationalization of the local markets. In response to this the demand for labour decreased in a relative expression, for the modern dualist development absorbed surplus labour into small industries and informal services. Thus, the type of structural changes available in the 1960's and 1970's promoted marginalization in the urban sector and income concentration.

The internal migration to urban areas was also a result of the extreme pressure of the landowners and strong land-takers against small rural proprietors and peasants without land. Due to the lack of support on the part of the Public Authorities, these poor rural strata had to abandon their plots and move to the cities.

B) The Labour Position.

In an effort to supersede the eventual lack of cheaper labour during the industrial surges, the Public Authorities showed little concern for social development in the rural area. Bad health and educational services, lack of formal legal protection, etc. were purely attributed to the natural condition of the rural environment. Recent research has shown that the urban environment did not correspond to the expectations of the rural migrant. But the majority of them no longer had a plot to come back to, so once they were settled in the towns they had to search for an industrial or service job in order to survive. They were thus, in many ways similar to an "industrial reserve army". It is quite comprehensible that most of the migrants remained unemployed or underemployed or became engaged in informal activities within the dual service sector as well. Only a small part could move into manufacturing, generally after passing through the practical training being constituted by an experience in the civil construction branch and then they became a part of the working class. In all respects, this migrant population has become a permanent feature of the urban environment, and consequently, they have to be considered by the Public Authorities as ordinary customers of the collective consumption of goods and services. This means that benefits of industrialization have - to some extent - to be offered to them, and modernization policies have to reflect a set of reasonable measures against misery, unemployment and unequal income concentration.

C) Urban Demands.

In 1940, the majority of the population was still living in rural areas. By 1970 more than half of the population was already living in urban settlements. In 1977 the urban population accounted for 67 per cent of the total. Two big cities, São Paulo and Rio de Janeiro, have each a population over 7 millions. Belo Horizonte, Recife, Fortaleza, Salvador and Porto Alegre were then towns with more than one million inhabitants each.

This signifies a tremendous demand for housing, health and social services and jobs. The relative accessibility of the terrains and the engineering of a highway network which is national-wide today, has undoubtedly contributed to a huge degree of migration. Paradoxically these facilities have contributed to the present "archipelago" pattern structure of the country, with pronounced relations of the nucleus/periphery type of model. The feeling, which gradually developed among the Authorities, was the result of an inadequate regional planning by the Public Authorities themselves, and consequently, a considerable amount of resources were then used to ameliorate these unfavourable circumstances.

The big urban areas (including Rio and São Paulo) are connected through the Paraíba river valley. These metropolises inherited a dominant position and they continue to dominate the Brazilian economy today. With the formation of the national highway network, these regions - especially São Paulo - practically absorb the other local markets, and hence stimulate to industrial concentration.

With respect to Rio de Janeiro, it is noteworthy that it functioned as the seat of the Central Government from the end of the colonial period (1763) up to the early 1960's (1961). In this way, the Government in its basic investments or expenditures in infrastructural works and Public services, obviously, gave priority to this area, easing the burden of the Private sector.

From being the "chief entrances" to modern immigration, Rio and São Paulo also benefitted from a subsequent urban absorption of Europeans, who were more skilled labourers. This established a very favourable situation for the diffusion of more advanced technology (machine technology) and also for the spread of entrepreneur guidance. As a result, both towns naturally evolved with a concentration of private enterprise, Government undertakings and the modern tertiary activities. The Brazilian Authorities had early envisaged the need for opening an urban centre in the hinterlands to serve as the capital of the country and contribute to an effective occupation of the hinterlands. This was done through the construction of a new capital, Brasília (1956-1961), which now has a population of roughly 900,000 inhabitants.

The change of the national capital to Brasília played an important role in the recent development of Goiás and Pará states. The presence of the federal capital produced a completely new economic climate in the peripheral areas.

D) Urban Population.

The overall growth of urban population (increase of 56 percent of the total population in 1970 and of 67 percent in 1977) requires expansive global policies for spreading of industrialization in several new urban areas. Obviously this had to be accompanied by considerable increases in agricultural productivity, while the industry would have to show a greater concern for labour-intensive features in several branches. The current trends for shifting from labour use to more sophisticated capital-consuming equipment are generally stimulated by the more dynamic corporations. Thus, it seems to be necessary to elaborate a system which could also stimulate the basic domestic industries toward a more intensive use of labour, in order to expand employment and raise the standard of living for millions of individuals.

Between 1940 and 1980 there was an impressive expansion in the number and in the size of the towns. During the second part of this period, 1960-1980, the number of "municípios" grew roughly by 16 per cent. There are approximately 5,000 of them. There is thus a tremendous pressure for the creation of new urban jobs, especially in the medium-sized towns (20,000 to 200,000 hab.). With reference also to urbanization and other services and facilities, these towns generally lag behind if they have nonindustrial communities. In fact, in regard simply

to the natural rates of demographic growth, the supply of new-coming labour yearly to the market has not been extensively absorbed.

Thus, huge investments are now needed in the area of human resources, to develop the natural abilities of the labour force and stimulate an adequate rate of jobs and/or activities. The need for massive expansion of schools and education is a reflection of the fact that the previous stages of the growth process which were based on spontaneous utilization of the manpower available have come to an end.

An inadequate pattern of mass education, health, housing, etc. now require far more imaginative policies than the simple use of the factors as they appear in the market. The rapid deterioration of the environment, extensive regional droughts and lack of highly qualified labour, while thousands of well educated workers remain without jobs, require a more flexible system of education and training. The Government Authorities must re-arrange their policies in order to use more intensively the available resources of manpower, through extension of regional projects, welfare regional programmes etc.

When examining the share of output for direct personal consumption, abnormal imbalances can be appreciated. Firstly, the estimated figures for individual consumption of industrial commodities, in reference to traditional branches, have grown at an inferior rate to the rate of expansion of these branches. This seems to indicate that basic production, including foodstuffs, textiles, footwear, clothes etc. has expanded in a response to external demand. Secondly, analysis of the real disposable income into its components as indicated by tax revenues shows that the disposable income of different income groups have evolved at different rates, showing clearly a process of income concentration. Since this condition has become extensively aggravated under the situation of the post-1964 policies, a major change is required of these policies to make income distribution reflect equitably industrial growth and capital formation. If the majority of the population is not allowed to share the fruits of economic growth, it may be interpreted as a clear indication that the non-economic costs of growth have become excessive.

Two additional ideas, or description of two mechanisms, may be useful to understand some peculiarities of this process of industrialization.

A. Manipulations in the Relative Prices.

During structural changes, the prices at which goods or services are transferred from seller to buyer are not necessarily related to the real cost or value of the commodities. Thus, the prices often depend on several intervening elements, including:

- a) the percentage of imports or exports in the marketed goods or commodity;
- b) the degree of subsidies or taxes which are a component of the price of the commodity or service;
- c) the cost of the domestic factors and inputs which compound the marketed goods or service;

Let us detail the above-mentioned aspects:

- (a) The foreign trade composition of the commodity. - This is an important element in a developing economy. The relative importance of imports in the final consumption of a product can reduce the final (market) prices of this commodity which is scarce at home, while the same factor relative to exports may produce an upward price mechanism to an exportable product.
- (b) The degree of "administrative alteration" of the price. - The Government Authorities can choose or follow different objectives in the face of the potential impact of a market price of a product or service. They can, for example, make it cheaper through financing or making it more expensive through impositive action. That is, they can attach subsidies or taxes, in accordance with their judgement as to the role of this commodity or service within the overall performance of the domestic economy.
- (c) The domestic trade composition of the commodity. - If the domestic price is high, and the commodity or service is considered necessary, from the point of view of the policy-makers, the tendency will be to finance it. If the price is low or the product or service considered otherwise to be unessential, then the Public policy may be to impose tax on it.

When these mechanisms exist in connection with publicly controlled or monopolized exchange and credit systems, then an extensive precondition exist for continuous manipulations which tend to change the relative prices of goods (or factors) and thus, when implemented, displace the basic dynamics of the re-allocative forces in the market.

Since during structural changes there is generally an imbalance between the demand and the supply of scarce factors or goods, the interplay of the manipulation mechanisms is closely correlated to inflation.

Capital has been the scarce factor in Brazil in the period in analysis. Brazil has been forced both (a) to sustain capital inflows and (b) to borrow, on a large scale, technology from abroad. In fact, imports of equipment, other inputs and know-how, etc. have been paralleled, during all the period, by protective measures to introduce international corporations into the domestic market.

On the other hand, there have been counterbalancing forces such as (a) growing costs for capital movements and (b) reduced responsiveness to adjustments. In relation to capital movements, the decreasing purchasing power abroad resulted in sustained changes in international relative prices which have made capital inflows more expensive. In reference to point (b), - reduced responsiveness to adjustments - This seems to be the result of continuous use of devaluations, exchange re-adjustments etc., which are reflected in loss of efficiency in the domestic market, due to an excessive reliance on capital to expand performance and productivity. This aspect may be properly understood when we remember that the domestic economy is basically labour-intensive in character, and for this reason a reduced demand of labour as productive input would have to lead to a composition of goods excessive capital input and, consequently a less competitive final cost. Paradoxically, the process of growth has thus contributed to altering the productive

composition of the commodities in the direction of scarce factor.

In the second place, the changes in relative prices have allowed the Public Authorities (1) to feed a general process of industrialization (1941-1962), and (2) after this re-direction of the mentioned process toward a more narrow focus, when the durables' producers were favoured with adequate financing, credit and, consequently, a larger demand (1968-1980). This re-directioning of the expansive policies resulted from practical causes such as the fact that the previous available policies protected consumers in general, and in this way, the focus of the inducing economic policies was spread enough also to protect less important branches, from the point of view, of the growth machine which the Public Authorities were supposed to be generating.

Ultimately, these ubiquitous manipulations have lost efficiency, and the Government has been compelled to adopt extensive practices which avoided sustained distortions in relative prices mechanisms, while consistently postponing the possibility of the corrective measures' impact on the core of the protected industries.

B. Apparent Causal Factors of More Rapid Growth.

The acceleration of the process of structural changes in Brasil must be connected to the coffee collapse in the 1930s and the continuous State intervention in the economy thereafter. After 1930, the action of the Public Authorities speeded up the spontaneous growth factors which had already begun slowly to move Brazil toward modernization in the 20th century.

(1) The Public Drive toward Industrialization.

The consistent drive of the Authorities toward a rapid expansion of industry influences the expansion of the rates of growth of production and increased greatly the traditional investment rates. A comparative study on these data, which can be converted into percentage rates of growth of particular or aggregate industrial sectors, shows clearly higher expansion rates at a sustained pace after 1933. Previous to 1933, inferior performances in the growth rates were obtained, in spite of the greater amounts of foreign currency, which was available. The explanation for this phenomenon can be found in the fact that: 1) the productivity of all resources in agriculture was lower than in the manufacturing sector; and also in the fact that: 2) the import-substitutive industrialization, - which certainly characterizes this take-off period - was mainly labour-intensive in character and demanded reduced amounts of exchange. This higher rate of investment in manufacturing activities was thus implemented basically by the use of domestic savings, while the available foreign exchange resources were orientated toward paying for the borrowing, on a large scale, of technology from the more advanced economies.

From a historical perspective, this stimulation of the structural changes attributed to the Brazilian state the function of the main reallocative force in the market. It gradually controlled the mechanism for pricing, the size of investments, and soon became itself an entrepreneur. When combining both political

and economic power, the State was in the position to promote expansive policies and reduce the social resistance to the impact of its drive toward industrialization.

Indeed, in the first period under our study (1940-1964), the Government Authorities promoted policies orientated to overall economic growth, while in the second phase (1964-1980), the State promoted the subservience of all other economic goals to the major goal of rapid production growth in industries with durable output. In order to attain this new result in the second period, the Authorities restricted the consumption levels of low-income strata and appealed to extensive foreign savings. This policy, which fed the mechanisms of income concentration, influenced greatly the behaviour of the business cycle. Such a policy was possible due to the availability of foreign capital which stabilized the general economic situation. The "oil crisis" contributed to extensive changes in the international capital market, raised the costs for capital and reduced Brazil's ability to adapt to reallocations abroad. This new set of cumulative downward forces seems to have caught the Brazilian Authorities by surprise, which certainly may be interpreted as an effect of both: (a) erroneous and (b) one-sided policies, especially when referring to the role attributed to the agricultural sector and the domestic market.

(2) The Role of Primary Activities as a Primitive Market.

Looking back to the induced shift of labour and capital from agriculture into industry and other non-agricultural sectors, two main aspects must be emphasized. Firstly, the public economic policies had sped up the movement of labor and capital from agriculture into industry and other non-agricultural activities. Since labour and capital shifted to non-rural activities, industrialization required higher capital consumption. This may have made the cost for the shift excessive. Labour in urban settings has thus performed more as an "industrial reserve army", than as a fully integrated part of a productive labour force. As a result, the excessively low level of urban income has persistently acted as a barrier to market expansion.

Secondly, since considerable resources have been drained from the agricultural sector, its low productivity has contributed to import pressures. The stagnation of agriculture and of non-urban economy in general has been characterized by low agricultural investments, widespread uneconomical agricultural techniques, as well as by rural impoverishment and unemployment. A relative abundance of land and labour and a paucity of capital have been combined in the Brazilian agricultural sector to obtain output with low investments and labour waste. The continuous incorporation of new areas to the previous land in use, have historically contributed to the postponement of a more fundamental attack on the problem of farming capitalization.

Thirdly, the general condition which made expensive crops produced for exportation less profitable has not been removed, but has developed further. This condition has produced a sustained drop in the real prices of primary commodities. The following elements may be listed as part of this situation: (a) excess

output of primary commodities; (b) higher productivity on the producing of primary commodities in MDC; (c) unfavourable developments in the costs of primary-producing in LDC.

(3) The Increase of Industrial Production.

These depressing factors have more recently been affected by erroneous or single-sided policies. They may, however, be adequately counteracted by a mix of policies which would re-establish import-substitution devices, with a new role given to the agricultural sector and the domestic market. For this purpose, a set of questions would have to be answered by the Public Authorities, in order to define the type of economic changes needed and to protect the nature of the future developments. When evaluating the cost of the process of growth achieved, the Government Authorities must also evaluate the prospective costs of adopting future technologies. In some respect, this was the type of analysis produced in the thirties, which paved the way for industrialization. The disequilibrium then existing in the money supply and in the economic factors were thus used to promote the expansion of manufacturing industries.

Once a dual urban market situation was developed as a result of the industrialization policies, the Government Authorities must regard this "waste" of labour resources as a "reserve" and thus promote the absorption of available labour through the creation of adequate policies. There is no meaning simply to deny the existence of this dual situation in the urban market. A set of policies has to be produced to use specifically this characteristic as an advantage, and such policies would have to make full use of labour-intensive conditions to increase the industrial production.

A program to encourage industrial development will generally increase overall industrial production. The need for desmantlement of plants while labour exists, as well as potential demand and substitutive inputs is, however, less understandable as a policy. When an industrialization policy was adopted by the state in response to the 1929 crisis, the conditions for increase of industrial production were limited by the domestic demand. In fact, the input and equipment which could not be bought abroad were substituted for domestic items which were generally inferior in quality and showed excessive variety. Notwithstanding these circumstances, substantial results were achieved in relation to the applied resources. Thus, the increase of industrial production per se was a factor which contributed to stabilizing and expansive effects.

Finally, the adoption of recessive policies to future promotion of new technologies in the domestic market seems to be an overly ambitious policy in the face of the real developments in the international scene. This policy attributes to an unimportant role to the excessive indebtedness, domestic and abroad, as well as to the human costs of economic growth. Each readjustment using this policy drive out of the market hundred of thousands of workers, while the costs for this excessive labour mobility fails to be accounted for anywhere. Simultaneously, a considerable part of the yearly new labour supply which enters the labour market is not absorbed. Conversely, the acceptance of the dual-urban market situation

may lead to the understanding and acceptance of the need for employment-oriented policies, improving in this way Brazil's competitiveness abroad through a productive mix which uses the economic factors being more abundant at home. The increase in the industrial production on this basis would certainly be more labour-consuming and more capital-saving than the present policy of industrialization has shown to be.

As we can see, the period of 1940—1980 has a considerable adequate set of particular factors, which are to be considered as a separate period within the Brazilian modern economic history.

Firstly, there is a characteristic period of sustained industrialization, with the participation of the State both as a direct agent and as an allocator. Secondly, this period comprises both shifts from rural to urban economy and from basic traditional industries to modern manufacturing industries. Finally, this period also characterizes the transformation of the country to a semi-industrial country.

1.3. The Brazilian Economic Historiography and Sources

A) Research Problem.

The elaboration, use and comparability of time series carry with them several problems. The four important problems are generally: a) conceptual difficulties; b) the adoption of a basis for purposes of comparability; c) source difficulties; d) methods of processing data. These problems, although not excluding others, are in close association and they have not signified a major barrier for our research, because in this historical period there is sufficient adequate and quantitative information available in Brazil.

A current problem which appear when dealing with official and semi-official Brazilian sources was that of discontinuity of deflated series. Since there is enough data of the Brazilian National Accounts in the period 1938-1947, their deflators have thus been used as the adequate. When it was necessary to construct a series, generally in real prices, it was constructed through deflation by the respective implicit deflator of the National Accounts. By this proceeding, we avoided to introduce additional bias than those originally existing in the official data.

We used the information of: the Fundação Getulio Vargas (FGV) and its departments; of Fundação Brasileira de Geografia e Estatística (FIBGE) and the different Ministries, as well as of the Federal Government Secretary of Planning. As a second source, if necessary, we used information of specific organizations or of private character. All statistical information, when the source is not referred to, pertain to FIBGE.; Banco do Brasil and Banco Central statistics, used extensively, were considered when presented as Finance Ministry information. While the Brazilian statistics are difficult, they are historically reliable, in the sense they indicate the direction of the main economic and social phenomena.

In the post-1964 period there is a visible attempt to submit statistics to political interest and omitting important information, especially when in reference to the structure of the National debt. In this sense, we used the obtained statistics as indications of basic trends, and not as a source of definitive accuracy.

B) The Brazilian Economic History.

As in other places, in the Brazilian case we can take two approaches to the relationship between economic and historical facts. The first view develops as a view of an economist regarding historical phenomena, i.e. the student explains an economic theory through the use of historical examples. The other approach is that of a historian doing an analysis of economic phenomena, using economic theories to obtain a more persuasive explanatory view.

We think this is a well-known problem. It is not our intention to detail this discussion here. But, recently in an article in American E. Review, A.E.R., Arthur Lewis has brought this issue into refreshing insight. By coincidence, the aspect of History as a moral discipline is clearly more aggressive in the case of the second approach i.e., when a historian takes up an economic theory to explain facts within a historical circumstance. The historic point-of-view has been regarded both as empiricist and historicist. Empiricist, because it gives particular importance to isolated phenomena, allowing thus to construct very particular explanations. Historicist, because it has been accused of drawing moralistic conclusions of explained circumstances, and thus performing this intellectual work as the teleological condition of "the King Advice" (Edmar Bacha, Manoel Berlinck). Undoubtedly the most irritating of all the "advices" of structuralist economic history has been the observation that general normative economic theories are of minor value to developing economies, since those economies must be known and explained according to their own institutions and circumstances (Roland Corbisier, Celso Furtado, Raul Prebisch).

In Brazil, as in other developing countries, historians, economists, like all intellectuals, generally face authoritarian regimes. There is little interplay of opinions, while democratic order is practically inexistent. Indeed, an attempt to establish a free intercourse of theories and ideological debates is generally faced with repressive measures on the part of the ruling system. Since some political parties and systematic doctrines are outlawed, the analysis of the problems and of the economic history of such countries cannot proceed as they would have done in democratic societies.

C) General Aspects.

In the face of the two above-mentioned characteristics, the historian's approach to economic history has been much reduced in the country, while a more general exemplification of economic facts, as is characteristic of the economist view, has been developed. While, a vast research work has been produced for scientific purposes. unfortunately a great deal of data manipulation and apologetic

work has also been promoted and financed by the Government Authorities.

In addition, the State most certainly reduces the independent role of institutions such as universities, publishing houses, research centres etc., since these institutions depend on Public funds or bank credit, which are generally acquired based on the Authorities' good will.

From a historical perspective, Brazil is a country presenting a culture and a national condition which are not yet stabilized and this implies that the struggle for defining an explanatory view of the national identity is still in progress. This, in part, may explain why the Public Authorities are so sensitive to historical questions.

Currently in Brazil, the most important ideas in historical methodology are inherited from the French positivism. While the Government is hostile to structuralist and liberal views in history, it is also favourable to liberal viewpoints in economic matters.

The prevailing official view in economic matters are, thus, neoclassical and the most accepted "school" is the so called "Chicago school". This view has found almost exclusive official support in the past 20 years, while other views have received different treatment.

This repressive atmosphere has not always been prevailed. A more free interplay of opinions was characteristic of the previous democratic regimes, which ruled the country based on the Constitution of 1946, until the military coup d'état of 1964. While the dictatorial regime ruling the country in the period 1930—1945 was actively against opposition, the following regime avoided a systematic suppression of dissident intellectuals and their work. These views were similar to those prevailing in the first Republic in the period 1896—1922. Although it seems absurd to refer to the State, while discussing the scope and the purpose of Brazilian economic history, it seems impossible for me to introduce this subject without a brief warning about the State's role on the issue.

D) The Main Trends.

While the influence of socialist doctrines is strong among some structuralist "schools", attempts in Brazil to organise research groups in history and economics under the influence of socialist doctrines were aborted by repression of the Authorities.

Certainly, the most influential Brazilian historians in this century have been firstly Caio Prado Jr. and secondly Nelson Werneck Sodré. Caio Prado published his works mainly in the period 1936-1945. The most important books of Caio Prado Jr. are "Historia Economica do Brasil", and "Formação do Brasil Contemporaneo". They can be found in English edition. These books are historiographically important because they reintroduce the habit of interpretation in history which were, in the period 1900-1939 strongly inspired by official views. This historian is still considered one of the most important Brazilian researchers, and his books are obligatory reading for every student of Brazilian economy and history. Sodré, whose first essay was published in 1941, was professor of Brazilian

history at the ISEB (Superior Institute of Brazilian Studies), a prominent research centre in the Kubistchek period, later closed by the military. (From now on, dates after a name within brackets gives the date when the analyst first carried out his systematic work.) The most known books of Sodré are "Formação Histórica do Brasil" and "Historia da Burguesia Brasileira". These books attempt to make a long run description of the Brazilian historical process of accumulation, since the colonial origins. Sodré's influence is related to the group known as "Historia Nova" (new history, 1958-1964). This group was mainly formed by Sodré's assistants, such as Pedro C. Cavalcanti, Pedro Figueira, Luís S. Dias, Maurício Mello, Ciro F. S. Cardoso and others. This group also worked in close contact with the group of Centro Estudos de História (C.E.H.-U.B.) from the "Universidade do Brasil". The C.E.H. produced a historical magazine, "Boletim de História", which became an official publication of the university. The main researchers at C.E.H. were: Jainer G. Pinheiro da Silva, R. Leão D'Aquino, Werneck da Silva, among others. Both the "História Nova" and the group of C.E.H. were suppressed by the military régime, as well as the national organism of the new historiography, the F.B. C.E.H..

The most influential structuralist "school" while in existence was undoubtedly ISEB (see above). ISEB combined three functions which strengthened any intellectual work: a) it presented a certain unity of political goals among the analysts; b) it had an enormous audience; c) it was listened to by Public officers (the President Kubistchek himself was said to appreciate much of ISEB views). Indeed, the political unity of ISEB consisted of a common action programme of different intellectual groups, under the leadership of the so-called "Itatiaia group". Thus, this experience united structuralists, functionalists and other groups to research - a group of points - they considered important. Important ISEB economists produced works which also are relevant from an analytical point of view, as a secondary source of the economic history. Works were written by such men as: Roland Corbisier, Gilberto Paim, Inácio Rangel and others (1956-1964).

The other important "school" which influenced Brazilian policies and Public planning and therefore, indirectly, the views on economic history was the C.E.P.A.L., CEPAL is the Latin American name for ECLA (economic commission for Latin America, an organism of the United Nations). Especially in the first period of its existence, CEPAL-ECLA presented a very unified view, under the influence of Anibal Pinto and Raul Prebisch, which strongly influenced Brazil and other Latin American countries (1948-1958). The main names in the Brazilian group of CEPAL was Celso Furtado, followed by Maria da Conceição Tavares, Dias Carneiro and Pádua Lopes.

Celso Furtado is the most notable Brazilian economist. The influence of his fourth work, Formação Econômica do Brasil (there is an English edition), became as widespread in Brazil as Caio Prado Jr's works. Furtado's work is certainly more known and accepted of the present generation of students. Furtado was planning minister of the last democratic Brazilian Government and presently he is working at Paris university, as well as at the Catholic university in São Paulo.

In fact, Furtado is presently working at an overall tentative explanatory view on the process of underdevelopment.

The contribution of Furtado is spread on ca. 23 main books and in several articles and reports. Furtado has used an approach closely to that of Anibal Pinto and Raul Prebisch. This approach consists in explaining in successive works the evolving of the mechanisms of the developing economies, as of his preferential study cases, those of Latin America. The approach is clearly structural. As a structuralist view, the analysis of Furtado attributes a great role to the institutional mechanisms of the social forces, in order to typify the circumstances of the economic phenomena. Maria da Conceição Tavares is the leading personality at Campinas university. She was a former member of the Brazilian team at CEPAL, and also later moved toward an independent view of the relations among oligopolies, underdevelopment and accumulation. She has worked with a global theory of underdevelopment, in some sense independent and in some ways parallel to Furtado's studies.

The most known books of Conceição Tavares are "Da Substituição de Importações ao Capitalismo Financeiro" and "Acumulação de Capital e Industrialização no Brasil". Conceição Tavares has a very particular approach when constructing her explanatory hypotheses. This approach shows the logical elements characteristic of the most influent British schools of Economics, since she develops her arguments intensively, as apparently abstract. A second reading reveals otherwise, her permanent need for linking theory to historical observation.

The most prominent of former Furtado assistants is Francisco de Oliveira at CEBRAP in São Paulo city. Oliveira has mainly worked on a sophisticated view of the State role in the capitalist development. He has produced a book, "Crítica da Razão Dualista" which certainly has been read by the complete present generation of Brazilian social and economic researchers. Oliveira argues for the particular character the "tertiary sector" performs in the Brazilian economy as a source of primitive accumulation.

José Serra (1968) and Carlos E. Martins (1960) are important names at the economic research centre of Campinas university, so as L. G. Belluzzo (1967) and Jorge Miglioli (1960), who have produced concrete studies on the economic function of the State, the economic theory of dependency and pure economic theory. José Serra has written several essays. His most notable work was certainly "O Milagre Brasileiro", where he resumes the juncture conditions which allowed the more rapid expansion of the Costa e Silva period and Garrastazu Médici, and the character of that upswing - based on "durables" expansion and foreign capital inflows - .

Carlos Estevam Martins has produced several papers on economic issues but his more important book has appeared as sociologist work. Martins, became important with his analysis of the "State bourgeoisie", where he attempts a clarification of the productive role of the Brazilian State, with the starting point of the class-nature of the State.

L. G. Belluzzo, who is an important juncture analyst in São Paulo, as

well as Professor of Campinas University, has become specialized in the analysis of the State as a "junction equalizer", and introduced the concept of declining demand when studying the character of Geisel Administration, and its economic policies in support of the domestic oligopolies.

Jorge Miglioli has also become specialized in the interpretation of the economic theory, producing interesting works on the character of the distribution theories.

Campinas as a "school" may be characterized mainly as a structuralist centre, which has developed monographic studies into the particular problems of the Brazilian economic history and economy, from the point of view of structuralist doctrines. In this sense, Campinas has counter-balanced, in the last years, the one-sided information that the Government has produced within its exclusive neoclassical approach.

An important research centre in São Paulo is CEBRAP. Paulo I. Singer who works there, produced several studies on capital accumulation, dependence, cyclical behaviour of the aggregates and labour market (1968). As Singer considers the historical condition in his approach, his view is rather close to an economic historian's.

In Brazil, the structuralists do not limit themselves to one field of research, as for example: Money theory, International economics, Growth theory, Welfare economics and Economic history etc. We suggest two reasons for this behaviour: a) the French influence; b) the Authoritarian presence. Indeed, the French influence is responsible in part for the "spirit of synthesis" or "the encyclopaedian view". That is, French intellectuals prefer to approach problems using multiple tools of analysis, even when this means an "invasion" in other fields. The Brazilian researchers certainly inherited this absorptive view through the large French intellectual dominance in the country. On the other hand, the authoritarian Public view toward intellectual's work certainly contributed to a certain mobility within different specialties, in order to find and keep work the analyst must adapt his approach or field to the political pressure and institutions, and are thus commonly driven into an encyclopaedian flexibility.

Furthermore, this French influence seems to be the main explanation for why the neoclassical scholars avoid what appears to be an excessive specialization in Brazilian views. The most important centre of neoclassical research in Brazil has been the Fundação Getúlio Vargas (F.G.V.). In the period before 1964, the main influence was exerted by the individuals of the research centres of FGV themselves, as of the centres of Econometrics, Fiscal, National accounts, etc. Then, the prominent personalities there were: Alexandre Kafka, Antonio Coutinho, Isaac Kersternezy, Magalhães Chacel, Jorge Kingston among others. After 1964, the "Fundação" became gradually known as "Escola", which is a reference to the post-degree school of business of FGV. The professors of the school became generally more known as theorists, than the people being at the head of the research centres. Among these people, the more notable were: Mario H. Simonsen, Werner Baer, Anníbal Villela and Carlos G. Langoni. The "Fundação" or "Escola" is a group

generally identified with neoclassical "schools" and the Chicago variant of economic analysis.

In order to stimulate controversies and produce information reflecting the official views, the Public Authorities developed in the late sixties the I.P.E.A. (institute for economic and social planning). IPEA was organized by some cadres who came from FGV for this purpose and gradually it became the main research centre during the seventies. While the dominance here are variants of the neoclassical "school", in IPEA have also appeared some Keynesian and even one Kaleckian essays. Thus, IPEA can be interpreted as a more open team designed to support the action with studies of less official approach, while within the Governmental views. In the past 14 years, IPEA researchers have produced some 80 monographic studies and two periodic reviews, as well as a number of papers and Government-reserved reports. This institute comprises also more than 100 analysts involved in their research works. Generally the following people are considered as the main IPEA personalities in economic research: Aníbal Villela (1963), Wilson Suzigan (1965), Carlos M. Pelaez (1964), Josef Barat (1973), Manoel A. Costa (1971), Fernando Resende (1970), Regis Bonelli (1968) among others.

Other important centres are: Universidade de São Paulo, Universidade de Brasília, Universidade de Belo Horizonte, Universidade do Rio de Janeiro, Universidade Federal Fluminense, Universidade da Bahia and Universidade de Campina Grande.

1.4. The Object of Brazilian Schools of Research

The Brazilian historiography developed more independently in the 19th century than it had done previously. Up to the beginning of the 19th century, with the exception of Antonil's work, there was little separation between Chronicle and Poetry or Eclogues. In addition to the work of José Antonil, appeared a work which is more Economics than Economic history; in 1819, José da Silva Lisboa produced his now famous book. During the 19th century, historical information was gradually developed by authors like Adolfo Varnhagen, Capistrano de Abreu and Euclides da Cunha among others. This historiography evolved thus from Chronicle to modern historiography under the French influence. During the Second Empire, the historical research was largely of a descriptive nature and also obeyed to official inspiration, since it was an attribute of educational institution generally maintained by Public sources.

The production of books was generally limited, due to the scarce domestic capacity of the Press, and some books were produced in as far away places as Saint Petersburg. It was also common that authors choose to publish in French, which per se indicates the limited public for these works. During the first Republic the domestic capacity of the printing industry was expanding and in the 1920 the books produced in foreign countries were generally reduced to those which required some particular condition or quality of production.

Correspondingly, in the 1930s appeared an important number of essays, which constituted the fact of a change in quality, when compared to the previo

dominant views and methods of exposition. In our specific field of interest re-appeared the study of the formation of the domestic market, the explanatory views of the main domestic processes in accordance with modern theories, etc. While some of the previous works had been highly methodical and informative, this new advancement brought the Brazilian economic historiography to a new level of explanatory power.

The problems related to coffee and industrialization were then introduced in the historiography. At the level of the economic debate, there also appeared a struggle between two distinct lines of opinions, one for the inducement of industrialization and the other supporting the traditional solutions for domestic problems. Some of the interesting writers of this period were: Leon Regray (1933), Oswaldo Aranha (1934), Lindolfo Collor (1934), Mario Cardim (1935), Armando Vidal (1934), Caio Prado Jr. (1936), Delgado de Carvalho (1934), Roberto Simonsen (1936), Eugenio Gudín (1938).

In fact, the debate was reflecting the changes occurring in the country. In the thirties, as in the decades of 1880 and 1890, the published material increased considerably in amount and quantity. In the decade of 1921-30, despite the strong political debate, it was not much reflected in the printed works because of an extensive public censorship. In the decade of 1931-40, there was a change in this situation. As we know, in 1930 the liberal revolution of October occurred. Since this time, new power only gradually was able to shift toward overall censorship, the political climate allowed intellectual freedom and publishing. This seems to be the reason for the existence of material which interprets the society, interprets the economic forces in the period and also attempts to present practical proposals as how to promote adequate policies.

What were the objects of research then in the thirties?

A rough summary would point out:

- the economic nature of the main national shortcomings;
- the backward character of a primary producing economy;
- analyses of the rural society and rural economy;
- analyses of the role of the primary products, such as coffee, cocoa, cotton, etc.
- proposals of economic programmes judged being able to develop the country.

In the 1940s controversial literature was greatly reduced. This was perhaps a result of the extensive repressive practices of the Government. It was also favoured by the climate of the war and after this also by the so-called Cold War. At the same time, Government staff groups such as F.G.V. and I.B.G.E., etc. were developed. Previously, the work of statistical collecting and processing was produced by D.G.E. (general directory of statistics), which also depended on collection and processing organisms at the State level, while the central work was more the one of adapting and producing analytic information. The quality of the state-collected statistical materials was unequal, due mainly to the fact that such organisms were following their own internal job dispositions, with a reduced

concern whereas the informative pattern could be suitable to federal or nationwide purposes.

In relation to the systems of collecting and reporting economic data, the dominant influences were Italian and French, which implied a conspicuous lack of common pattern in the proceedings and results, with reference to the construction of national aggregates.

Nevertheless, the National Accounts Centre of FGV could elaborate the National accounts compatible to United Nations pattern since 1939, beginning the official series in the year 1947, and periodically revised. These revisions are generally the result of changes in concepts related to system of indexes in use.

After noting briefly the institutional developments in the 1930s and 1940s, we can turn to the main objects of research which prevailed in the forties:

- elaboration of the main national aggregates;
- patternization of a national system of accounts;
- study of the agrarian structure of the country;
- study of the capital flows and their influence in the industrialization policies; etc.

In the fifties, it is possible to report a diffusion of the above themes with particular emphasis on the elaboration of series of the main aggregates back to a period of one century, the study of the problems of growth and development with Brazilian reference, the study of capital flows, and also the study of regional domestic inequalities, etc.

The number of analysts who contributed in these two decades increased also a great deal, and every list if necessary, will present omissions. We could name among others; Correa e Castro (1948), Pereira da Silva (1948), Aristóteles Moura (1952), Heitor F. Lima (1954), Antonio Rios (1954), Magalhães Chacel (1953), Luis S. Lopes (1940), N. Werneck Sodré (1941), J. Garrido Torres (1952), D. Ribeiro Barbosa (1950), Margareth R. Costa (1955), Ney C. de Oliveira (1954), Isaac Kersterzky (1955), O. Santos Andrade (1957), Jorge Kingston (1948), Celme R. Vieira (1956), Edson de Carvalho (1957), H. de Carvalho Gomes (1955), Djacyr Menezes (1948), Haroldo Levy (1954), Pompeu Accioly (1948), O. Bulhões (1945), Fernando H. Cardoso (1958) and Joel R. dos Santos.

If we add to this list the ISEB researchers who were previously mentioned in section 1.2.2., we then have a quite representative sample of the main analysts in the period before 1960.

In his interesting book "O que se deve ler para conhecer o Brasil" (what is necessary to read to get to know Brasil), Werneck Sodré summarized his personal reading up to the fifties. While some of the names we referred to are not included in that work, it is possible to find in his list other individuals and work references in the area of Economics and History which are important to future research.

The importance of the literature of the 1960s, 1970s and beginning of the 1980s can be established from the following argument. This last period produced some 50 per cent of the secondary sources which are of first interest to

an economic historian. In this period, the number of papers, reports and also sectoral studies increased greatly.

In relation to the sixties, it is also observable that the objects of research also changed for political reasons. Up to 1964, a considerable effort was focused on the study of the functioning of the economic system, and proposals were developed within a reformistic spirit. Of course, these opinions were restrained after the political change in power.

Since the political parties existing before 1964 were involved in this debate which involved the country's economic structure, the available produced literature, then reflects this criticism and also the effort made to propose alternative proposals. Thus, the literature of this period is important to an economic historian in order to understand the judgement of the forces involved at that time. The main themes can be summarized as follows:

- the primary activities' structure and role;
- the need for an agrarian reform and how to produce it;
- land taxation and capital accumulation;
- progressive fiscal systems, fiscal policies and inflation;
- inflation and industrialization;
- concentration of corporate power and foreign capital;
- the need for the State adoption of economic planning, etc.

It is easy to see that the mix resulting from these themes are clearly related to the influence of growth theories and structuralist views. Only those admitting the peculiar character of the domestic economic problems, and only those seeking theoretical options with an emphasis on the importance of internal change would produce a list like this. Thus, the list alone seems to support our view that the structuralist "schools" completely controlled the debate in Brazil, when a free climate existed. Of course, these options reveal programmatic interests which were not accepted by the traditional ruling forces in the country.

The forces which supported political change in 1964, through the coup-d'état, and which were in some form represented by the resulting military Government, promoted an overall suppression of debate and also of the intellectual debate. This was achieved to such an extent that when some "Brazilianists" in the late sixties attempted to debate some aspects of the recent Brazilian evolution, some of them recognized they were holding a monologue.

Paradoxically, the presence of these "Brazilianists" also contributed to a gradual improvement in the climate of economic and social research, since the themes which were discussed by them were later also taken up by the domestic analysts. Since a considerable number of domestic students were sent abroad, especially to U.S. universities, this increased the independent scholars in the new generation. At this point, a more free climate has been achieved in the most important research centres.

Thus, in the late sixties and seventies the main research themes have been:

- criticism of structuralist methods and works;
- the evolution of money components in the Brazilian economy;
- elaboration of historical series on prices, wholesale and cost of living;
- analysis of the Brazilian model of accumulation;
- analysis of the Brazilian economy within the parameter centre-periphery;
- analyses on trade, exchange and their effects on growth.

The most important new contributors to the developments in these themes were: Nfcia V. Luz (1961), Eulália M. Lahmeyer Lobo (1960), Nataniel Leff (1966), Albert Fishlow (1961), Helga Hoffmann (1963), A. Candal (1967), Warren Dean (1966), W. Downs (1966), Richard Graham (1968), Flávio Versiani (1970), M. Teresa Versiani (1970), Claudio R. Contador (1968), Alberto P. Guimarães (1962), Manoel M. de Alburquerque (1960), Mircea Buescu (1964), O. Iório (1962), Herbert de Sousa (1963), Otávio Ianni (1963), Gabriel Villanova (1966), Carlos A. Alfonso (1961), Maria Horta (1971), Celsius Lodder (1969), Barbosa Araújo (1970), Cláudio Considera (1968), Castro Faria (1968), Milton da Mata (1964), Maria de Castro e Silva (1970), Maria Poppe de Figueiredo (1969), Sérgio Silva (1968), Aloysio Biondi (1964), João Cardoso de Mello (1974), L. S. Garry (1968), among others.

Since other analysts, previously referred to, did also their work during a part/or all of this period, this list must be considered as an addition to the previous ones. I suppose they are representative of the basic information useful to orientate a research of an economic historian in the reference period of this work, in the Brazilian case.

1.5. This Work

This book comprises basically the interpretation of the economic policies adopted by the different Brazilian Government Administrations in order to promote economic growth. These policies are evaluated and their effects eventually submitted to empirical check, mainly through regression analyses.

The hypotheses we previously mentioned were considered as explanatory tools of the long run Brazilian process of industrialization, comprehended by the dates 1940--1980. This long run period, can be divided in two characteristic phases, stages or sub-periods. A first division would thus comprise the (a) period of import-substitution as the main line for the process of industrialization; this period would last to the political change of 1964. A second period or sub-period would be characterized as (b) of industrialization-cum-exports. This period or stage would be characteristic of the post-1964 type of the economic policies, thus, concluding our basic periodization.

As a result of this reasoning, this book comprises two parts: I) which extends through the chapters 2 to 6, where chapter 6 is a balance of the period or sub-period, and a part II) which comprises chapters 7 to 11, where chapter 11 is a balance of the last period, while also comparative to the period of part I. The chapter 1 is this introduction, while chapter 12 adds some conclusions.

A) Part I.

Chapter 2, presents us to the Brazilian economy under World War II and

shows the Public effort to eliminate the negative effect of the downswing of 1938, as well as of the sudden reducing of imports caused by the struggle. We see the gradual emerging of the State as an allocator for growth, as well as a producer, in the heavy industry. Chapter 3, gives us an idea of the efforts of the postwar Government toward liberalization, and the persistent presence of the Vargas policies in the economy, under the form of growth inducements and import-substituting industrialization. A glance into a deposits function shows the mechanism of savings transference which was giving advantage to non-rural activities.

Chapter 4 and 5, shows the dramatic struggle between the State-sustained expansive forces and the more traditional forces in the economy, opposed to induced domestic industrialization. After some liberalization and association with foreign capital, these resources are used to more rapid industrialization, orientated to overall type of industrialization, but with an emphasis on the occupation of the hinterland and heavy industry.

Chapter 6, presents us to the apparent fatigue of the mechanism of import substitution, as well as the effort to recover or substituting it. This chapter also includes an empirical analysis with finds which can support our explanatory hypotheses.

B) Part II:

Chapter 7, which opens the second part, shows the strong change of policy adopted as a result of the elimination of the democratic régime. The formation of a new policy is achieved both through tentative moves and also of doctrinary persistence, giving as a result a business squeeze apparently stronger than necessary. As a natural result, chapters 8 and 9 describes the conditions of a new boom this time based on the cumulative effects of a favorable international demand and capital inflows, as well as of the cumulated unused domestic capacity.

This new boom presents the top figures of the new expansive period, but shows also the reappearance of the structural maladjustments which acted in the previous period, showing their embodied character in the shifts of the Brazilian economy and, consequently, the persistence of such prolonged maladjustments through extensive periods of more rapid growth.

Chapter 10, shows the more complicated policies gradually introduced by the Geisel Administration, policies which were basically followed up by the Figueiredo Administration, which ends our period of study. These policies, while intending to assure high return to capital, intended also to stimulate within some margin the home market demand and to proceed with the characteristic liberalization trend of the post-1964 period.

Chapter 11, as mentioned, presents a balance, while some conclusions are advanced in chapter 12, presenting both periods under a common view.

2. THE BRAZILIAN ECONOMY DURING WORLD WAR II.

2.1. Introduction

As it is well known, the period 1933--1962 can be characterized as a phase of import-substitutive industrialization in Brazil(1). In this chapter we will discuss the functioning of this process during World War II.

Changes in the level of economic activity are continuous phenomena. They operate in any economy through prices, employment and output. We generally characterize this process of change in terms of the cumulative repercussions of supposed mechanisms of change. This process, once started, is generally believed to continue in the same direction by feeding on itself, a kind of inertia. Diversion from any trend is supposed to result from other kinds of forces, which may be interpreted as acting in the converse direction. Thus, changes are here supposed to be cumulative and to move the economic components.

The importance of economic policy-making has often been underestimated in the developing countries. The economic history of every developing country can illustrate how a change in the growth of income correlate with changes in economic policies. Unfortunately, the analysis of this process is still in its first steps. In some cases, the historical analysis of previous policies is made with prejudgements. In these circumstances the rule of evaluation used by this LDC research is influenced by propagandistic targets. A deep understanding of past policies is only possible when a relativistic point of view is adopted. Past policies should be analysed with contemporary methods, but they must also be understood within a historical framework. If we try to appreciate past policies exclusively in the light of the present situation, then we shall be able to explain some unobserved facts in the period, but we shall not be able to understand the source of many errors and omissions which have and has occurred. This historical insight must be used not only to explain the past, but also as a basis of a sophisticated analysis of present-day policy-making.

2.2. Overall Economic Policies

The world economic crisis of 1929 came to Brazil some months before its irruption in New York and it remained in the country up to 1933. This economic disruption caught the country by surprise, and the disastrous effects precipitated political turmoil. At the time, almost 60 percent of the economic activities in the urban sector depended on export revenues. This unexpected downward movement in the economy was tangible in its effects(2). Unemployment, of course, became widespread, but the dimension of the maladjustments that individuals suffered can scarcely be described through the unemployment rate. There were military rebellions in several states, under the direction of the political force "Alianca Liberal", and the situation rapidly resulted in a civil war, after which a new Government was established, putting a term to the so-called "First Republic".

A) Effects of 1929 Crisis and Government Policy.

The classical effects of the international crisis of 1929 were not very different in Brazil from what they were elsewhere. Unemployment increased and became a new source of inequality. The level of gross domestic product fell. The prices of agricultural products fell even more than the prices of other goods. Mountains of coffee bags had to be destroyed, in order to insure a minimal price for a whole set of the agricultural products (3). At that point, most governmental experience in economic policy-making had been acquired through the policy of coffee "valorization" (4). Hereafter, the Public authorities were compelled to diversify such policies, reduce imports and wait for a substitutive answer from the industrial sector.

This answer came in 1933 in the form of a spurt in the manufacturing sector, based on labour-intensive utilisation of ~~unused~~ equipment. This industrial surge was also alimented by an amelioration of the exports position, which lasted until 1938. A certain amount of electric-generating capacity and also of the industrial equipment that had previously been accumulated under the coffee expansion of the 1920s, and the home labour mobility which resulted from the world crisis, contributed to establish the intensive labour-character of the mentioned expansion.

B) Swings.

The basic feature in the 1930s of Government control to induce upward movement were: (a) the monopoly of foreign exchange in the hands of Banco do Brasil and (b) the creation of the "Caixa de Mobilização". Thus, the Government policy in fact stimulated an upward movement which - in connection with the relative recuperation of exports - assured expansion in the period 1933-1938. The strong reduction of import capacity helped to promote the import-substitutive effects in domestic activities. The sudden international recession of 1938 was, however, negatively reflected in the Brazilian economy as well. This may partially explain the decrease in economic operations between 1938 and 1941.

Furthermore, in 1938, a war was clearly to be prepared abroad and the international demand for inventories must also have contributed to a scarcity of resources available for the domestic expansion. Thus, efforts to replace capital goods were in some degree unsuccessful at that time, especially after Brazil was constrained to reduce and later to stop her trade with Central Europe, Italy and Japan. A loss in potential production in 1938-1945 resulted from the decreasing import supply. This also contributed to stagnant productivities and unused capacity, despite of the intensive usage of equipment

As a specially devised policy for economic recovery, the Government provided financial support for agricultural products and also established a War programme. This programme, in fact, was a basic device for expanding infra-structural facilities. The Government was also stimulated to substitutive policies by the United States Government (5).

C) The Need for an Integrated State Action in the Economy.

Two North American missions were sent to Brazil to study the possibilities for an increased substitution of imports, since the United States Government was not expecting to maintain the level of imports and finance which was currently demanded by their Brazilian counterparts.

The Brazilian Government tried to elaborate a set of more sophisticated policies for the Federal intervention in the economy i.e., assuring a gradual pace of integration and coordination and placing Public authorities in a position of being able to introduce some planning mechanisms. The Government was engaged in an effort to eliminate the effects of the recession of 1938, a recession which coincided with the partial recuperation of the previous generalized drop in coffee and other agricultural prices. Notwithstanding considerable public efforts, in 1940 the level of objectively restricted imports was already considered intolerable at home. In this situation, the adoption of a War programme by the Government may be interpreted as both a natural and unavoidable solution.

The basic public purpose assigned to the War programme was to prepare more efficiency in the communications within vital parts of the country. Barracks, roads, airports and ports were constructed or improved. These activities also satisfied the North American need for a solid operational basis in Brazil for the war in Africa(6).

Thus, the War programme had a clear effect on the expansion of civil construction, employment levels and also manufacturing output. During the war, the level of available imports was low - as previously stated - . As a result, the exchange market control was lifted, but the exchange rate remained quite stable, with accumulated foreign currency (7).

2.2.1. Investment Policy and the War Programme

The Brazilian economy during the war period showed inferior expansion levels when compared with those in the surge of 1933--1938. But it also showed, in the war, a superior utilization of the available resources. The average rate of growth of the gross national product - considered in geometric expression - was 3.6 per cent annually for the period 1940--1945, while the similar indicator was 5.0 per cent for the earlier period of 1933--1938. One visible source of the moderate expansion was that the manufacturing output decreased in several branches. The absolute decrease in the expansion of the industrial rate was due to the lack of intermediate goods and raw materials, as we have previously noted. The abnormal conditions of war demand contributed positively however to the reallocation of the available domestic resources, despite the fact that this high level of activity resulted in a sellers' market (8).

In the absence of competition from abroad, the domestic producers were competing less and less among themselves. This resulted in a lower final quality of the output, a phenomenon which was aggravated by the scarcity of

inputs and the improvised substitution of inventories. The war acted in this sense as a protective mechanism in the process of expanding most of the domestic activities, and not only of the manufacturing activities, as has been pointed out (9). The producers and the authorities expended a considerable effort to get basic adequate supplies of labour and inputs, with reduced concern for guarantees of quality of the final products delivered to consumers.

2.2.2. Agricultural Prices and Imports

The overall Brazilian policies for sustaining minimal profitable prices for agricultural commodities and the attention, in general, given to the supply side resulted - furthermore - in an intensification of demand and a consequent rise in prices.

The receipts from exports expanded in the period. A partially explanation for this may be the more differentiated character of the available exports. Another strong reason may be the increased war demand for some commodities, especially for textiles, coffee, cocoa and strategic minerals. In particular with regard to coffee, the price almost doubled in the period 1939-1945. Due to the weight of coffee in the trade balance, the price rise produced important improvement in the terms-of-trade. Although, the inherent difficulties both in transportation and in the foreign supply of domestic-demanded imports remained roughly the same through the whole period of war, the expansion of exports advanced at favourable rates (10). Thus, the artificial circumstance of the war came into scene in order to promote a change in the 1930s customary position of the Brazilian foreign balance of trade, since now the war was constituting an effective "barrier" to import demands, and stimulating substitutive activities. The insufficient imports contributed to the creation of extensive surpluses in foreign currencies. The cash part of the surpluses required that the Government had to expand the monetary supply in the domestic market, in order to absorb such surpluses. Thus, this was one source of inflation in the period (11).

The Government-produced measures in order to stimulate the level of substitutive capacity of the domestic industries can be also interpreted as a source of expansion in the agricultural prices. The Government both stimulated the exports during the war and supplied credit to domestic activities. As a result, the domestic economy required additional agricultural output to a larger number of workers, as well as the external demand was stimulating the rises in agricultural prices. The Estado Novo Government was not hostile to the countries of the "Axis". It has even been pointed out in the literature that in the same period the authorities initiated preparatory measures to join the war, without defining the possible enemy. As we mentioned before (12), the main purpose of the Government was to use expansively the war preparatory measures. Thus, the

Government policy was to implement the organisation of an infrastructure in transportation and communications which would prove to be adequate for large scale operations. This had to be basically constituted of investments in transportations and communications, including equipment. Since equipment were largely imported, it was important to the Government authorities to appear to be as neutral as possible, in order to achieve the necessary imports from abroad. On the other hand, a maximum effect should have to be obtained by the use of domestic factors, as domestic money, projects elaboration capacity and intensive use of labour, especially in civil construction branches. Thus, it was a public policy to use intensive-labour techniques in order to avoid additional inflationary effects.

An analysis of the data available of the period shows that considerable amounts of labour force entered into both the manufacturing industries and the civil construction branches. This labour force was certainly shifting from subsistence activities both in the primary and the tertiary sectors, and thus reflected in increases of the efficiency of the domestic economy. Since additional amounts of labour were being employed in the secondary activities, the agricultural sector was demanded to rise production supplied to the towns.

2.2.3. Policies of Public Financing

The Government managed to finance a large part of this expansion through budgetary deficit. Since trade imbalances stimulated money issues, the budgetary deficits were in fact part of the inflationary trends. This budgetary decision for continuous deficits was possibly not taken at once. Documents available at Finance Ministry level shows that the decision was adopted gradually, under the influence of the experience acquired in the coffee policy. It is reasonable to deduce from the available information that the Government should have projected a coming situation characterized by lower imports and, consequently, the Public authorities were in a position to envisage that insufficient capacity would be produced in the substitutive performance of the industries, as caused by the imports'squeeze. This insufficient resulting output of the industrial sector would necessarily have put an upward pressure on prices, at least on the more vital commodities. Notwithstanding, the existent evidence of the Government's ability to foresee this trouble, there is also a clear indication that the Public authorities in fact underestimated the effects of the monetary expansion. The domestic inflationary process was really accelerated by the trade imbalance, characterized by the growing exports and accumulated foreign reserves (13).

The adopted public programmes during the war can consistently be described through the following five points : (a) capital formation through infrastructural expansion; (b) a heavier taxation, with the adoption of direct taxes; (c) bond sellings; (d) price control on consumers commodities; (e) rationing of some consumers goods, especially exportable goods. A heavier taxation system,

including a regressive tax on individuals, was introduced. Before, only indirect and import taxes had been applied. Such taxes were distinguished by the characteristic that they did not fall on any specific factor of production, and so could not be considered a part of the cost of hiring any specific factor. Thus, the current interpretation is done that tax on individuals corresponded to a more mature degree of the concern of the Public authorities on growth policies, since the reallocative effect of taxes on individuals is greater than the correlate effect which can be achieved with indirect taxes. The taxation on individuals' income absorbed a part of the increase in income engendered by substitutive industrialization that had begun during the period 1933-1938. This taxes compensated somewhat the Government for the reduced public income from taxes on imports.

The excess disposable income at home exerted a considerable pressure on the value of the marketed goods, due to limited productive resources. In the face of growing demand there were, thus, price rises. These prices rises affected also agricultural commodities, since during the war the external demand for the Brazilian exportable commodities was expanded. The domestic-orientated agricultural production benefitted, thus, from internal and external pressures on prices.

The selling of bonds, especially to consumers of higher income absorbed some of the potential demand for unavailable import goods. Information of Camara Sindical of BOVERJ (Rio de Janeiro Stock Market) shows a nominal expansion of the trade securities of 11.7 per cent annually, in the period 1938--1945. If the year-term basis is moved to 1947, the year rate falls to 9 per cent. The reduction in private expenditure was thus converted into savings and investments. It would have been desirable to sell Government bonds in a larger quantity, but the structure of the stock market was still insufficient for this. In this respect, the actual obtained result on the reduction of the inflation rate was not impressive. If it had been effective, the commodities' shortage would have mainly been visible on exportable items, but unfortunately this was not the case.

2.2.4. Rationing and Monetary Policies

In order to impose some discipline on the distribution of the goods in shortage, the Government undertook rationing, with substitutive commodities for some items. Cards for implementing distribution and price control were therefore adopted in order to prevent a total collapse. The black market rose, but this was possibly the only way to assure, at reasonable prices, a small share of scarce commodities to the greatest number of consumers. One obvious result of such a policy was the mounting surplus of money in the hands of a few individuals, a surplus which was not being fully absorbed through the savings institutions. The amount of personal savings grew, both in the hands of

the private individual and of investment institutions, crating resources, especially for traditional industries which used traditional available inputs. It has to be observed the fact that the mechanism of price control was not reducing the production of civilian goods, since the substitution effect was being run . The absence of production was the effect of reduced imports, and simultaneously of the weakness the domestic economy was presenting to fully assimilate the gap which rose as result of decreased imports. Thus, the presence of a mechanism of price control was of antiinflationary nature, and in some extent it can be said that it reduced the effort of the domestic market to additional import substitution. This paradoxical situation certainly express how deep was the dependence of the domestic forces on the evolution of market mechanisms abroad. In figures per capita, the domestic income expanded up to 1945 to a figure of 10 per cent over that of 1939, according to F.I.B.G.E. data.

A) War Inflation.

In regard to the Government policy to curb the prospective inflationary effects which were expected under the conditions of war - as we said previously- the results of this policy were feeble.

After 1942, the Brazilian Government was forced to buy growing amounts of foreign currency produced by the trade surplus. Since the Government had decided to operate under a budget deficit, this additional expansion of money was excessive. During the period between 1942 and 1945, the Rediscount Department of Banco do Brasil put into circulation more than 11 billion cruzeiros (14). Due to the shortage of goods, the additional supply of money contributed extensively to a rise in prices. Between 1939 and 1945, prices expanded corresponding to 40 per cent of the supply, but the figure for the period 1942--1945 was as much as 75 per cent.

B) The Need for a Central Bank.

The absence of a central bank was also a negative factor in this period. Credit mechanism had to be put into effect in coordination with money recovering, to support the Government policies. However, these mechanisms were moved by different authorities and thus could not always be effectively administered by the Banco do Brasil or by the Minister of Public Finance. There was in practice redundance of circuits, and an unavoidable delay in relieving certain visible failures. Late in 1945, a step was taken to control the monetary component, through the creation of the Superintendency of Currency and Credit (SUMOC). Its basic initial purpose was to set the money market under control, contributing thus to the future creation of a central bank (15).

C) Imbalances, Cheap Rediscount and Easy Credit.

Table 2.1. reveals the expansion of credit we have previously mentioned in the period under study, with a yearly basis rate of expansion of 3.4 per cent. The rate of expansion in nominal terms was greater for credit than for inflation, when overall credit was being considered. During the war, the rate of loans was larger than the average for the whole period in the table. This is

TABLE 2.1.

BANCO DO BRASIL: Loans and Issues.
(Million of Cr)

(1) Year	(2) Other Loans	(3) Loans to Business Activities	(4) Rediscount Department Net Issues
1939	198	1,232	170
1940	435	1,693	220
1941	816	2,370	610
1942	1,328	2,885	-1,000
1943	1,681	3,298	2,700
1944	3,503	6,137	3,500
1945	5,489	8,830	3,130
1946	5,015	8,922	2,570
1947	4,628	9,517	-
1948	4,688	10,653	731
1949	5,634	12,918	2,400
1950	6,613	14,901	7,200

Source: Banco do Brasil

related to the considerable export surpluses and the public need to issue bonds and expand credit to cover imbalances.

The importance of the Government rediscount policy seems to have been especially notable in this period. In fact, the same explanatory hypothesis holds when a model is checked to this period (1939-1947), in order to observe the possible explanatory power of the Banco do Brasil loans to business activities (column (3) in the above table 2.1.) in the function of the total loans extended by all banks. The resulting equation is (standard error within parenthesis):

$$L_B = -1,418.890 + 0.219 L_G^B \quad (I)$$

(0.066)

$$R^2 = 0.9400$$

$$t = 42.7509$$

The results seems to point that variable L_G^B (loans to business activities in the Government bank) allow to reconstitute the total loans to all activities in the banking system in a high degree, phenomenon which should be expected from our main hypothesis on the behaviour of the Government interest policy in the period. The t value also points to an acceptable sample.

We may formulate thus the hypothesis that Government was in a strong position with the evolution of the capital market in the period, being in favourable conditions, engendered by the war and the import substitutive policies, to make successful economic intervention.

D) Capital Formation and Steel Developments.

With respect to capital formation, the infrastructural works were developed at a slower pace than was expected by the authorities. Some facilities were extended in capital and equipment due to the Brazilian Government's decision in 1942 to make war against the 'Axis' Powers. As a result of the Brazilian decision the North American Government supported the financing of a heavy steel plant in Brazil.

It has been suggested, in literature, that the Brazilian Government was looking for financing abroad to the above mentioned steel mill before the war. It looks like, in order for Brazil to abandon her commercial links with the Axis Powers, this steel mill had to enter the bargain.

The output of the mill was designed for production of up to 300,000 tons steel per year, and it could easily have been expanded to one million tons through additional blast furnaces. The cost of the project was already over a hundred million U.S. dollars when the mill began to operate in 1946, bringing the then domestic capacity of production up to 60 per cent of the total domestic consumption. The North American financing was carried out through Eximbank. The private demand at domestic level for the National Steel Co. bonds was cool, which certainly originated from the fact that the Governmental control of a portion of the corporation was higher than desired (source: Banco do Brasil).

Another point which contributed to the growing economic influence of the State was the appearance of an income tax system. Before this, the public receipts were based only on indirect taxes and import-export taxes, which contributed little to allocative policies, especially as regards consumer behaviour. In this sense, the personal tax system is generally considered as an improvement which was a result from the industrial expansion in the 1930s, an expansion which carried with it a bigger gross national product and, consequently, reflected in an expanded disposable income (16). Indeed, the gross domestic income expanded in the period up to 1945, and this expansion, as argued, implied demand for goods which not always were available in the conditions of the market under war. The expectable reaction of the economy in such a situation would have been for prices to have risen until all expendable income had in some way been absorbed. In this sense, the mechanism of price control was an attempt to reduce the inflationary changes. Thus, while reducing the pressure on price levels, controlled demand was not avoiding income expansion. The expansion of gross, and, consequently, disposable domestic income, in the period up to 1945, did not reduce its pace and continued

to act in this direction until the early sixties, with the only exception of isolated quarters, and years, such as 1947 and 1953.

E) A New System of Taxation.

The public purpose of the establishment of a personal income tax was to transfer the pressure from present consumption to future consumption through added productive capacity. Governmental authorities had not, at hand an overall integrated set of policies which they could expect would be significantly related to a foreseeable responsiveness at the domestic market level.

The authorities tried to produce new mechanisms to obtain expected response from the market. They were attempted to develop these new mechanisms based on their previous experiences with the policies in protecting the coffee prices. While extending, this minor experience to the situation of the whole national economy, a considerable array of new questions appeared which required flexibility and adaptability. It is clear for us, that the Government then tried to avoid excessive fluctuations, which had to be expected under the conditions of the war. It was necessary to avoid the waste of scarce resources and the inequities resulting from the still recent downward movement. This desire compelled the Government to produce the War programme and this decision consequently compelled the Public authorities to intervene further more to adjust the level of activities. At this point, the Government had two concrete tools in its hands: (a) increasing control of money and credit and (b) the War programme (17).

It is reasonable to interpret the Government, in this period, as the main economic agent acting on the market. The policy-makers established a set of goals. These goals were defined in quite general terms, since the definers themselves were suspicious of "planning", "State-controlling" etc. They worked to stimulate employment, substitutive activities and relatively stabilizing of prices. The two first objectives were met, but not the last one. As for the other Latin American countries, and similarly to the effect caused by the World War I, the Second World War had had a disruptive effect on the domestic Latin American savings, due to added imbalances and a following strong inflationary push. As estimated by Felipe Pazos, the level of prices under the Second World War rose some 3-fold as an average in the Latin American Region (I.M.F. 1949 estimate). In the case of Brazil, both in the official estimates and in the estimates of particular economists, as the well-known study of E. Gudín, point in the direction of moves in the level of the prices considerably over the average figure for Latin America.

Brazil almost doubled that figure. It is natural that through the War programme, the Government did not have in mind to employ investment resources only by make-shift measures, but also in an attempt to expand the productive capacity of the country, through developments in the infrastructure and heavy industry (see graph 3.5). This effort could have been better implemented if violent changes in the price structure could have been avoided, especially those occurring through inflationary distortions.

2.3. A Strong State

A point which has seldom been examined is the fact that through the organisation of an economy of war the Government authorities can largely create policy conditions for a complete dominance of the State in economic life. The Brazilian market was weak, and the continuous intervention of Public authorities would obviously orient this market also according to the State economic interests (18). In this sense, every war economy is a controlled one and it provided the Government with another chance, in a short period of time, to come upon the scene and promote its economic dictates. This time, after the crisis of 1929, the Government authorities were able to produce a development programme - under the label of war programme - . This programme defined the goals and mobilized resources to accomplish them. The Government control was necessary because it was the only force with methods - when considering the historical momentum - which could help heretofore hidden expansive economic forces. These potential cumulative forces could exert a positive influence when induced by the Public authorities and this fact would bring with it some additional favourable changes, otherwise non-available in that difficult period. In this period of opportunity, the Government followed a clear set of developmental policies, particularly those of industrialization. In this sense, it is also observed that the Public authorities were consistent with the basic rules of which they had previously fixed to overcome the depression of 1929--1932.

The allocation of resources that in practice could be obtained by the Government authorities was also expressed in the ability presented by domestic economic branches while protecting their own expansive policies. These industries produced on their own considerable substitutive amounts of items, which allowed them to achieve a sustained production and saving resources. It is quite natural that the scarcity of supplies abroad, due to the world conflict, would be reflected in the decreasing inventories in the domestic market. The overall import-substitutive effort produced not only inputs but also cadres. Thus, the public effort to produce an intelligent war economy also contributed to the formation of local expertise in private and public planning and administration. This expertise should thus be available for implementing other necessary changes in policy when a future need came.

2.4. The Labour-Intensive Character of War Industrialization

The public choice of capital formation through infrastructural works

contributed to stimulate the recovery in the beginning of the forties. But at the end of the war Government demand was clearly excessive and was competing with the private sector for civil construction capacity and related inputs, with additional expansive effects on prices. This has been evident from the available statistics, as well as from the analysis of several economists, as E. Gudin (1953).

The figures for labour absorption into urban sector activities were higher than ever, and this absorptive trend was cut down only by the stagnant measures of 1947 and the slight 1948-49 fluctuations.

The need for financing an army and other war expenditures complicated a great deal the economic scene and reinforced the constrained character of the demand. When the Government made expenditures connected with the war, the commodities demanded in this way were, in part, imported and could, in part, also be found at home. The domestic production benefitted from this. The current effects in this case were a more committed labour, more wages paid out and consequently more income and increased demand. In this sense, the restrictions which were imposed by the war were compressing this added demand. An examination of the wages in manufacturing in the period show respectively an increase of 13 per cent in 1940 over the preceding year, and successively 15.4 per cent in 1941, 13.3 per cent in 1942, 26.5 in 1943, 39.5 per cent in 1944 and finally 16.7 per cent in 1945 (19).

In a similar fashion, the income of proprietors was expanded. Due to the low capacity of the country to produce capital goods, the expansion of income could only in a scarce manner be converted into extensive private investment. The prices could not follow, in these circumstances - a normal expansion - and inflation was thus unavoidable.

The sellers of consumption goods had amassed a greater proportion of income. But this additional income could not be converted into new additional purchases, especially with reference to intermediate goods and equipment. This particular characteristic contributed to the reduction of cumulative price-rises, but not on a scale large enough to avoid inflation and scarcity in general.

Thus, the expansion of the manufacturing activities was limited due to the difficulties of the imports, and this also contributed to inflation. As we stated previously, the exports receipts expanded considerably in the period, in part due to the fact that they were now presenting a more differentiated character, and in part as an answer to the stagnant behaviour before the war.

The trade surplus accumulated during the war, was achieved in spite of fluctuations in the different export items. The war demand stimulated the domestic production of textiles, footwear, beverages and the extraction of strategic minerals. Coffee occupied a special position, since its higher prices were reflected in expanding prices for other agricultural goods. The drought of 1943 and also some spread frost prevented coffee from expanding according to the increased demand abroad. But, on the other hand, this relative shortage

contributed to higher prices, with ulterior effects on the coffee market. Although the war produced many difficulties in transportation, the general volume of exports grew, and contributed in this way to the achievement of domestic gains in the trade balance.

The amount of reserves in foreign currency contributed to an optimistic outlook for the Government at the end of the war, with broader credit powers and a civil construction boom, followed by a large expansion of the real estate market. These developments were characteristic of a very favourable situation, if we take into consideration the stage of the economic forces that the country was then provided with.

2.5. Effects of the End of the Second World War

The end of World War II carried with it a significant political change, together with other changes as well. The Vargas regime was ousted as totalitarian, elections took place and a new Government was elected under a new Constitution.

An evaluation of Vargas's achievements would have to compromise a detailed analysis of his fifteen years in power. His government obeyed clearly centralist views, especially in the phase known as "Estado Novo" (1937-1945). In this phase, the Government was engaged in developmental goals and the low maturity of the Brazilian market, induced the Public authorities to continuous intervention. These interventionary policies were gradually developed into a system, which expressed reallocative purposes under the leadership of the State. The creation of the national steel company shows that the Vargas Government evolved from a merely encouraging of business activities to becoming an effective public participant "entrepreneur".

To obtain this result, the Brazilian Government was supported even by the U.S. Government. This shows the very special set of international relations created during the period of the World War II (1939-1945).

Some important shifts occurred in this phase in relation to the production capacity of agriculture. These changes were decisive for the subsequent process of industrialization. First, there was a considerable decrease of production connected with the exports, as a result of the stagnant forces abroad in the 1930s. Raw cotton, coffee and cocoa decreased their performance without visible reallocation of their share to other primary exportable commodities. Those products which were traditionally more orientated to the domestic market: rice, tobacco, potatoes, tomatoes, corn, sugar cane, beans, etc, followed a normal development. Climatic conditions, however, affected coffee and cocoa, reducing the cocoa supply in 1943, in which cocoa followed the decreasing figures expressed in the coffee output.

Within the industrial output, important activities such as the petrochemical branch became depressed during the war, contributing to its inferior performance in the economy. Other branches, such as iron and steel, cement, rubber, footwear etc. expanded comparatively much, despite the mentioned above difficulties

REFERENCES.

- (1) There has been some debate on the sense of "import-substitutive industrialization". According to the most important analysts of the Brazilian case, this label must be reserved to effective packages of reallocation policies and not to eventual tariff protection and their effects. This is the view of C. Furtado, C. Tavares, J. Serra, C. Martins, a. Pinto and others. Accepting this view, we think that 1933—1962 corresponds basically to such a label in the Brazilian case.
- (2) A detailed analysis on the issue is to be found in Simão Silber, "Análise da Política Econômica e do Comportamento da Economia Brasileira", 1929-1939, Rio de Janeiro (from now on RJ), 1973.
- (3) More than 5 million tons of coffee were destroyed in four years, in order to maintain the agricultural prices (S.E.F.-M.F.)
- (4) This "coffee valorization" had been applied mainly in the phase since 1894. See A.V. Villela and W. Suzigan, "A Política do Governo..." - IPEA, RJ, 1971.
- (5) See "Foreign Relations of the United States", (1946), vol XI, pp 390-98.
- (6) See Marechal Mascarenhas de Moraes, "A Campanha da F.E.B. na Itália" B.E.E., RJ, 1954.
- (7) See "Relatório do Banco do Brasil", RJ, 1946
- (8) This is also the point of view of M. Alves, in "Economia e Revolução", RJ, 1946
- (9) This point has been explained by C. Furtado in some of his works. The idea that only manufacturing industries benefitted from the trade gap can f. ex. be found in Correa e Castro, "A Guerra e o Desequilíbrio Econômico", 1949, São Paulo (SP).
- (10) See "Anuario Estatístico do Brasil", IBGE, nr 8.
- (11) For the data, see "Relatorio do Banco do Brasil", 1946.
- (12) The resume of the War programme was obtained from some numbers of the "Jornal do Comércio", in the period.
- (13) This hypothesis is based on a speech of the Finance Minister, issued on Dec. 1944.
- (14) According to "Relatorio do Banco do Brasil", 1946.
- (15) This view is expressed in a report of "Conselho Técnico de Economia e Finanças". 1946.

(16) This point is also analysed in A. Villela and W. Suzigan (see above-mentioned work).

(17) We attribute, thus, a particular importance to the War programme.

(18) The Finance Minister Correa e Castro (1947) payed attention to the need for reducing the State influence on the economic forces as an aspect of post-war reconversion policies.

(19) Computed from information available on statistical yearbooks of IBGE.

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3. THE ACHIEVEMENTS OF A DECADE.

"It has only gradually begun to dawn on central bankers, in the face of much domestic political incredulousness or active opposition, that inflation is a world and not merely a national problem, and that the first step necessary for an effective anti-inflationary policy is revision or severance of the monetary links between the national and the international monetary systems- and this realization has been impeded by the fact that only a handful of economists specialized on the study of the international monetary system as a system have proved competent to give intellectual expression to the problems confronted by central bankers in their practical dealings with one another and with their individual country's problems." (1)

3.1. Introduction

The post-war period was characterized by several adjustments abroad and also in Brazil. This period coincided in Brazil with the government of Marshall Dutra, and the period can be divided into two characteristic phases or sub-phases: 1.) 1945--1948. The main characteristics of this first sub-phase were; a) liberalisation policies, b) unfavourable development of the juncture. 2.) The second sub-phase can be described like this; 1948--1950. a) more restrictive monetary policies, b) favourable international developments (2).

3.2. The Dutra Government (1946--1950)

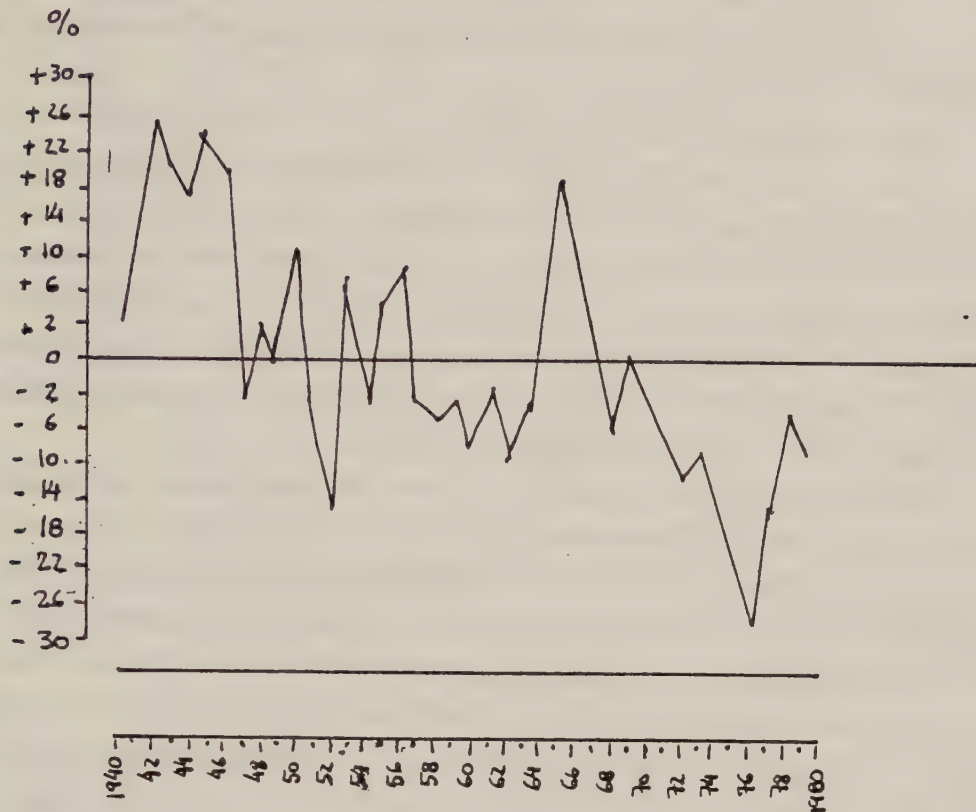
A rough description of the economic policies in this period may be stated as follows: the Government authorities implemented liberalisation measures to improve the international position of Brazil. This coincided with the period of reconversion abroad from war economy to civil economy. As a result of unfavourable changes, the Government adopted more domestic orientated policies.(3) This position coincided with devaluations abroad, the preparation of the Korean War, increases in demand, a.s.o. These international changes resulted in a more competitive situation abroad, which was favourable to the prices of Brazilian commodities. This, in turn, contributed to the stabilization of the Brazilian policies in the period.

3.2.1. The Overall Government Economic Policies

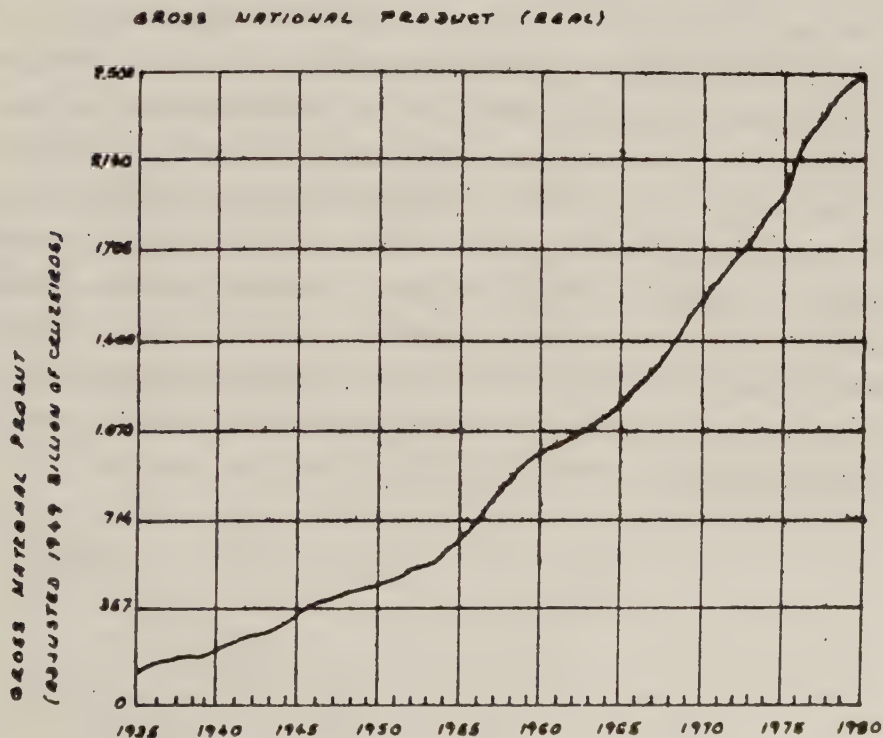
The Government had identified, as being a mainly objective public policy, the achievement of a free, dynamic and competitive economy, based on the private enterprise system. This meant a certain aversion to the existent developments of the State-controlled sector, the structure of which was to be gradually reduced to an "all-terrain machine", on the way to the private sector. The State-controlled sector should thus assist the way, but not compete with the private-orientated commitments.

Brazilian Foreign Trade Variability (Trade Balance) (U.S.\$ millions)

Figure 3.1: Percentage Change (1940-1980)



Brazilian Gross National Product in 1949 Billion of Cruzeiros
Figure 3.2, 1935- 1980



SOURCE: BANCO DO BRASIL, FUNDAÇÃO GETÚLIO VARELA, FIBGE, MINISTÉRIO DA FAZENDA

ADJUSTED VALUES

- This meant also that there would also be a minimum of restraint to a full adoption of competitive business, in private terms, the role of the Government activities being to implement the necessary changes in aggregate demand, which seemed to be adequate in order to promote free business, at home and abroad. (4)

If the expanding public sector could be driven out of the scene, and if a readjustment could be promoted to reduce excessive and low-competitive domestic industries, then the domestic economy would be in a position to play a more effective role in world trade and, thereby, obtain an adequate and sustained rate of domestic growth. The acceptance of the principles of free business would have to counterbalance the domestic developments achieved during the war period and the hoped for positive result would be the re-integration of the Brazilian economy into the international market.

The new worldwide conditions after the war had a significant effect on the Brazilian economy. According to the trade agreement of 1940, which had been produced with the United States Government, the Brazilian post-war administration removed both the restrictions on the exchange market, adopted in the course of the war, as well as other regulations from the 1930s. Hence, the Brazilian administration implemented this policy and also abandoned other regulatory powers. As a result, the liberalisation policies adopted promoted a so-called free developmental course in the domestic and foreign markets. The assumption behind this policy was that the free interplay of market forces would lead to increased prosperity.

The proprietors and consumers in general were also reacting against the enforced austerity of the war years. They were demanding imports both for investment and for consumption purposes. These pressures, in addition to the reduction of the market barriers, resulted in a strong rise in imports during all the after-war years. Due to the fact, that many countries were still in extreme imbalance as a result of the war, the Brazilian credits in foreign currency could not always be converted into hard currency or transformed into immediate import of commodities. The trade flows were still disturbed. In this position, Brazil had to pay for her imports - hard and fast, but she had also received a part of her increase in exports in the form of postponed values, as credit abroad. Brazilian reserves were, therefore, soon exhausted by rising and uncontrolled imports.

A) Liberalisation Policy.

Due to inflation and the waste of the industrial equipment in the war years, Brazil was importing in large amount mainly from the United States and she required, for this pupose, resources in foreign currency in payment.

Thus, the liberalisation of the exchange control coincided with forces such as the strong import needs and the scarcity of hard currency, producing a domestic crisis of foreign exchange reserves.

The North American pressure to achieve a free market situation in Brazil, was not a realistic claim, when approached from the standpoint of the Brazilian interest. A more realistic outlook would have oriented the available exchange resources to finance the substitution of equipment, but because of the remotion of controls the exchange resources accumulated during the war were consumed in a broad list of items and for this had not followed the needs for domestic capital demands and formation. This situation was aggravated by the refusal of the U.S. Government to include Brazil as a beneficiary of the Marshall Plan.

What can be the explanation to the failure of the exchange liberalisation? Why was this mechanism unfavourable for the purpose of the Government in that historical circumstance?

The basic purposes for changes in trade policy are to drive upward the trade balance. If an adequate rate of growth of export earnings can be promoted through changes in trade policy; then it is probable that the Public authorities will consider the adoption of this or these changes.

Any kind of manipulation which allows the expansion of exports may also present two related changes:

- a) A change which is induced by - or induces - additional import spendings.
- b) A change which is related to the changes in the productive structure.

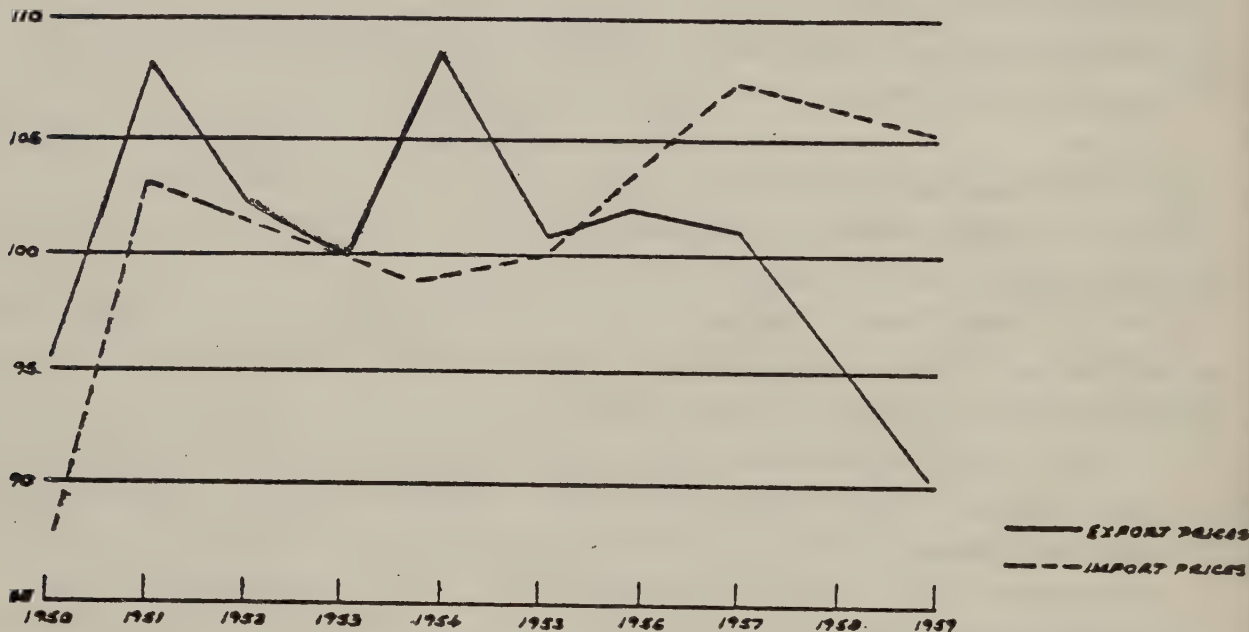
Liberalisation of the exchange rate, in this case, was related to the adoption of a single unprotecting rate, which may be called "the market rate". This "market rate" is established through successive rounds of price fluctuations, where the "suppliers" and "demanders" of exchange values trade their needs. This is, in fact, a very strong type of adjustment to the efficiency of the international market, and a LDC's economy is generally without conditions to fully implement a set of these rounds.

In the case of the Brazilian economy in the period, the Public authorities projected the change basicly according to the following implicit hypotheses:

1.) - That the exchange reserve available was sufficient (800 million of U.S. dollars) to support both the impact of the change in the rate of exchange and the impact of the elimination of controls on imports.

2.) - That with the adoption of a free exchange rate policy, the capital outflow would be relatively reduced, due to additional confidence abroad in the Brazilian authorities.

EXPORTS & IMPORTS PRICES INDEXES: LATIN AMERICA



1953=100

SOURCE: I.M.F.

FIGURE 3.3

3.) - That the U.S. Government would maintain its previous policy for industrial expansion in Brazil and supply the resources for S.A.L.T.E. plan (from now on SALTE plan). This conviction was fortified by the pressure of the U.S. Government toward the Brazilian exchange liberalisation. (5)

In fact, these suppositions proved to be unfounded. A more audacious assumption would certainly have been approximate to the facts. On the other hand, the above stated subcondition b) to justify exchange manipulation, i.e., related changes in the domestic productive structure, was practically unavailable.

The industrial sector had been producing near its full capacity during the war - apart from exports - and now this sector was in need of investments and new equipment. In fact, the post-war years, is when the manufacturing exports declined, due to reconversion of MDC's capacity to civil production and consequent adoption of restrictive measures to avoid competition from abroad.

In relation to the traditional Brazilian exports - primary items - the domestic expansion of consumption and the reduced capitalization certainly made the prospects for additional exports less favourable. A given amount of financing was required abroad in order to stimulate a further primary expansion, but this was difficult since the international growing demand for capital was making the Latin American Region an area of less attractive capital-importers.

B) Effects of Liberalisation.

Despite the Government adoption of the policy of devaluation to improve efficiency at home, the single exchange rate mechanism revealed, paradoxically, to be a rigid feature and was inviting the implementation of a multiple rate system.

In a complementary effort to reduce domestic demand and feed internationalisation, the Government also adopted restrictive monetary policies, which desactivated a part of some branches of the economy, especially in the years 1947-1948. (5)

The apparent unsympathetic attitude of the North American Government and financial circles produced some confusion in the Brazilian authorities. The domestic effort toward economic stability was not impressive abroad. The inflation and the cost for reajustments were estimated to be problems characteristic of countries with bad management, and no attention was paid to the Brazilian choice for internationalisation policies.

Despite the reduction of credit and support abroad, the Brazilian authorities engaged in the elaboration of the previously outlined developmental plans. These plans were before skissed in main form - at four hands - with the North American authorities. In order to increase the domestic efficiency of the projects under drive, the authorities summed up all the projects in the SALTE plan.

The Government found some favourable circumstances in the increased international supply of goods, which appeared in the market as an effect of the devaluation policies, of the more tolerant North American policy as part of the preparation of the Korean War, etc. The relative domestic renewal of equipment and additional available supplies of raw materials contributed in this phase to sustain the pace of the industrial expansion so that the growing output of cement, iron and steel firmly backed other domestic expansive forces. Thus, despite the fact that most of the economically imbalanced nations around the world were experimenting with a round of devaluations, - this being an unfavourable phenomenon to the LDCs - The Brazilian economy managed well enough as to embark on an expansive trend of the international market, at least during the first years in the fifties; certainly due to some ability from the Brazilian authorities to profit from the additional demand by the Korean War.

As a result of the foreign trade reactivation, the domestic manufacturing industries also experienced faster expansive rythms in the late forties and in the fifties, than previously. In comparative terms, the primary activities remained stagnant. The range and the rate of manufacturing expansion was gradually enlarging and respectively speeding up, during the fifties. The substitution of equipment demanded strong inflows of exchange, and the Government was reluctant to proceed with a systematic policy for obtaining loans abroad.

In 1948, the steel mill of Volta Redonda came near to its effective capacity and the civil construction could temporarily be accelerated. This was in contradiction with the international juncture and even with the local economic policy, which was restrictive to credit and additional employment. The change in the international situation after 1948 compelled the Brazilian Government to adapt and thus became more favourable to credit expansion.

3.2.2. The Government Action for Industrialization

An expectation was growing worldwide that there would be, because of devaluations and the conversion of the U.S. economy to peaceful performance, and to the probable effect of temporarily decreased demand for 3rd World goods.

With the devaluation of £ Sterling, in 1949, several countries had to follow the example of Great Britain, a fact that generally produced unfavourable results for LDCs. These devaluations were necessary for European countries which had suffered much from the effects of the war. (7) This adjustment expressed an improvement in the recuperative forces abroad and lead to increased performance of the international economy, with obvious negative effects on the stability of the less mobile economies.

In the market, the devaluation coincided with new favourable prices for coffee and a greater demand for coffee. This, on the other hand contributed to further dependency of Brazil on the North American market. (8) The policy of the Public authorities at the domestic level was to diversify markets, as they had already succeeded in doing in the 1930s. But now the conditions were different, and soon also the Korean War came on the scene. This acted against the prospects of rising exports to Europe.

The North American authorities had also changed their views in relation to a possible expansion of the Brazilian industrialization. They became more restrictive toward the Brazilian import-substituting policies.

The Brazilian-adopted changes in the economic policies included control of the exchange market. The rising demand for Brazilian exports was domestically considered to be a persistent phenomenon, but the lack of foreign currency required a restrictive system of exchange. The new system continued to provide resources for imports within the official list of priorities, such as payments of debt-servicing and remittances of profits abroad, but additional capital outflows were to be traded at the exchange "parallel market"(9). The system was also restrictive to minor flows, such as tourism, individuals' remittance, etc.

A) Exchange Policies.

In order to protect the domestic industries, the exchange rate was therefore manipulated to slightly reduce the artificially high value of the cruzeiro, facing the real developments in prices abroad. In addition, the persistent domestic inflation and restrictions on wage increases contributed to some additional labour mobility.

The artificially high exchange value of the "cruzeiro" - particularly in relation to the U.S. dollar - became intolerable under the free exchange rate period. The North American market was not only cheaper than Brazil's in its costs, but at the same time it was also the cheapest producer in the world market. (10) The Government had thus to produce an effective tariff schedule on imports in order to protect the relatively large investments in industry made in the 1930s and during the war period and also in order to protect the expansion of the private sector that followed substitutive industrialization.

The situation required an obvious solution: The Government was forced to use the export surpluses to finance industrial expansion, so that all efforts of almost two decades would not be converted into losses. As a consequence, the Government authorities changed their policies, and established a foreign exchange licensing system through a scale of priorities for imports. The Government no longer facilitated import of goods which were already being produced in the country, irrespective of the domestic level of production. In fact, this meant an adoption clearly similar to the policy followed by the previous Administration, a policy which clearly supported domestic industrialization.

The system also provided - through the multiple exchange rate mechanism - a form of subsidizing import of capital goods, including manufacturing equipment. Through these mechanisms, the Government adjusted the economic policies to the general direction followed by the economy which was based on expansion, as we explained before, on manufacturing import-substitutive growth.

The common venture plans were in part realized, but the direct financing abroad was not obtained.

The common venture programmes were ordered to achieve a clear picture of the possible bottlenecks in the Brazilian economy, and to allow the Government to eliminate them extensively, especially at the infra-structural level. The prospective solutions were to be based on the common effort of the public and private sectors, and to use the improvements in the infra-structural network to the local exploitation of natural resources.

B) S.A.L.T.E. Plan.

In relation to the SALTE plan, the domestic authorities were also introducing the experience being acquired during the work of the Joint Commission U.S.A.-Brazil and added it to the staff which was previously involved in the War programme. With the SALTE plan the Government elaborated, for the first time, a five year plan of investments. These investment would be mainly public and would also be oriented towards unattractive, but vital points, to accelerate the economic development. This, of course, reflected a major purpose, and this plan connected Dutra's administrative purposes to the ideas of Vargas' *Estado Novo*. (11)

Both plans (infra-structural research and SALTE) were launched in 1948. Up to this time, only two years remained for the Dutra Administration. But the interest it revealed for the developmental policies can be interpreted as a political realignment. It also prepared the developmental lines of Dutra's successor, Vargas. The SALTE plan included the expanded financing of cattle-raising, fisheries, waterways and transportation, expansion programmes in public health, highways & railways, etc. Electric power producing and distribution, as well as petroleum exploitation were also included. This plan was later modified by the Congressional action, and it took a defined final form under the next Administration, becoming thus the main systematic effort of the Public authorities to carry out the substitutive industrialization policies further. (12)

Since a great deal of Public investment took place, the SALTE plan also has to be understood as an effort to integrate the existing Public developmental projects. The next phase of the growth chain was still missing, and it would be the creation of a Public bank for domestic investments which should be separate from the Government's commercial bank. This was produced later as a result of the experience which the authorities accumulated in the years to come. (13)

The main projects which existed earlier in the Government area were the Paulo Afonso Hydroelectric plant and also the construction of the Rio-Bahia highway. The Paulo Afonso Falls, on the border between the states of Bahia and Alagoas, was the chosen point in the São Francisco river to construct a hydroelectric plant. It was fully beneficial to the Northeastern Region, which until the construction of this plant had been hampered by shortages of electric supply.

Only a few areas then had adequate electric power for their supply and it was coming from small private plants without sufficient resources to expand. Thus, there in Northeastern Region, the private sector also had been lacking the capital resources to promote modernisation and the public assistance was a necessity for such a large regional improvements as these two projects.

The Rio-Bahia highway (1,600km) had been constructed some 50 years before, but it was built during the World War II, with the purpose of securing land communications in the case of a sea blockade.(14) After the War, its real developmental purpose was appreciated again. The highway was completed in the early sixties. It allowed a better connection between the expanding manufacturing markets of Rio de Janeiro and Sao Paulo and the Northeastern Region.

Thus, the Companhia Hidro-elétrica do Vale do Sao Francisco (CHESF) was constructed as to have a complementary function in producing electric power in the region, a function which gradually evolved to become the main source of electric power expansion in the area; when, in the late fifties, the demand of electricity in the region was caught in a serious bottleneck.

3.3. A Balance:

3.3.1. A Short Balance in the Period 1940--1950

Economic Growth: A considerable amount of growth was obtained in the period 1940--1950. The Brazilian economy was able to develop its allocative capacity and the Public authorities became capable of elaborating a real overall set of growth-inducing policies. Urbanisation expanded, the population increased, and the manufacturing sector absorbed labour in a much greater proportion than in the thirties. This proportion was also greater than the one which would be available in the coming fifties and sixties.

This overall urban expansion could absorb the growing costs for imports and the engendered excess labour due to the stagnant situation of the agricultural sector. In this period there was also an effective transfer of income from the non-urban sector, due to the indirect subsidizing of manufacture inputs with the exchange gains obtained by the primary exports. This transfer of resources contributed to the industrialization under the condition of the import-substitution mechanism. The achieved degree of industrial expansion presented a growing link among the branches, which is characteristic of a more advanced stage of growth.(15)

In relation to this decade (1941--1950), the number of manufacturing plant workers grew to an average of 5 percent, in annual rate, while 5.3 percent per year was the rate of expansion observed in a number of industrial establishments. São Paulo increased its margin in the leadership of the industrial expansion and was followed by Rio de Janeiro (then Federal District) as the second manufacturing producer. The Southeastern Region increased its relative size within the national economy, due to the expansion of the manu-

facturing industries there.(16)

In 1950, Sao Paulo states manufacturing product had already reached to a figure corresponding to more than 25 per cent of the industrial production of the country, while including 40 per cent of the manufacturing workers. 90 per cent of the industrial products of the Nation and 80 per cent of the industrial workers were concentrated in only six states: Sao Paulo, Distrito Federal (then Rio de Janeiro city) Minas Gerais, Rio Grande do Sul, Rio de Janeiro state and Pernambuco.

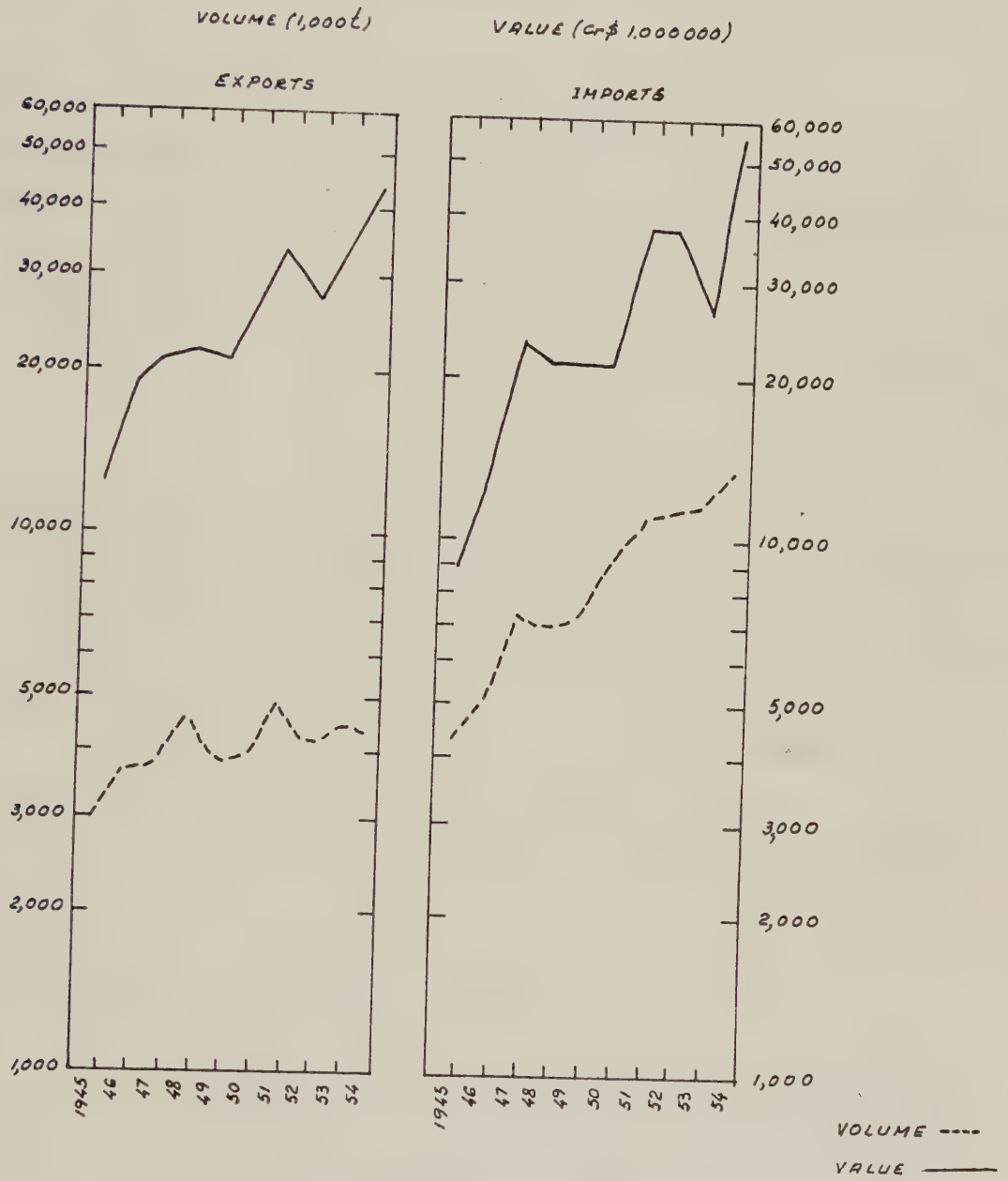
It is possible, in normal terms, to observe easily the changes in the pattern of the manufacturing activities.(17) Foodstuffs and textiles together suffered from a relative decline from 65 per cent to some 50 per cent of the whole industrial output value. Heavy industry expanded. Metallurgical plants, machine and equipment factories and oil refineries expanded to a great extent. The same thing happened to transportation and communications. Steel, cement and rubber showed an impressive growth (see figure 3.5).The need for supplies to the civil construction branch stimulated heavy output and positively influenced capital investments.(18)

The appreciation of the final results of the industrial change in this decade also casts a light on the broad different circumstances in which it was achieved. The policy-makers had to respond to a sudden (but not deep) recession in 1938. This was followed by World War II, which changed considerably the capacity of the international economy. The War difficulties were followed by liberalization and devaluations, abroad and at home, and here they required a move towards new and more sophisticated protective mechanisms. The War brought with it several fluctuations and scarcities. Thereafter, the domestic economy could not fully profit from the rapid reconversion to consumption abroad because of a reduction in export capacity. The rapid reallocation, especially in the industrial countries, moved unfavourably the terms of trade, a process which was partially counteracted in favour of Brazil by the devaluations and later reversed by the negative forces of the effects from the Korean War.

Hence, in a short period of ten to twelve years(1938—1950), the basic components which influenced policies were radically changed. Facing this the Government showed that they were relatively able to adapt, to correct mistakes and also to adopt a basic common view toward supporting the trend of industrialization.

FIGURE 3.4

FOREIGN TRADE



SOURCE: S.E.F., MINISTÉRIO DA FAZENDA

3.3.2. Peculiar Fluctuations in the Forties

A) Shortage of Exchange Reserves: -

The difficulties produced by the exhaustion of exchange reserves contributed gradually to the appearance of signs of a cut in the expansive trend, but this phenomenon was postponed by the Korean War (19). The main downward kinks were observed in 1947 and late in 1953. Both cases were counteracted by upward cumulative forces, which were influenced by international demand.

In the case of 1947, the restrictive policy, then adopted, reflected a decline in employment and even some reduction of Public expenditures. This contributed to the depressive effects. This policy was maintained for almost a year, and the failure it produced were observed when the Government adjusted to expansive economic forces. The decision taken, weighed considerably in favor of the developmental option, the previous Public engagement in importation of new equipment and the governmental involvement in heavy industrialization.

B) Fluctuations Abroad in Demand and Prices:

The subsequent demand produced by the Korean War may also be interpreted as an influence on the expansive trend of the country's economy. This was "in line" with the expansion of world trade, an expansion which included successive adjustments abroad and the activation of unused productive capacity. These measures abroad followed the liberalization of consumption, through the removal of price controls, devaluations, removal of trade restrictions, new flows in international credit, etc.

The new expansion of the international trade created some advantages for the purchase of capital goods. This expansive activity required a balance between: 1.) scarce exchanges and fluctuating exports on one side and, on the other side, 2.) rising expenditures abroad. This balanced function was, thus, to be implemented by the multiple exchange rate mechanism.

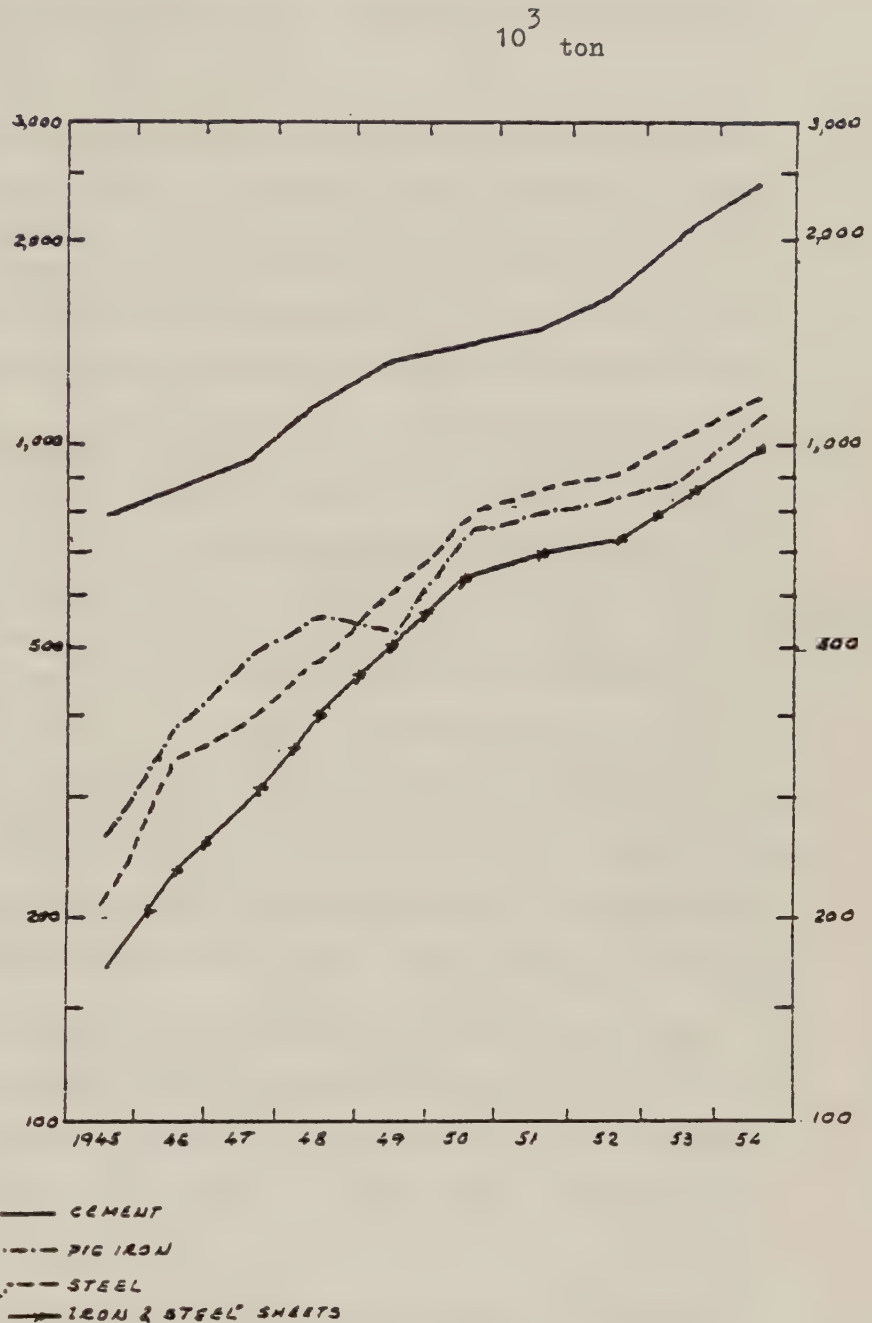
In the post-war period, the domestic Government found itself in a condition to relax the control on demand, due both to the increased pressure at home as well as to the pressure abroad. Since the agreement of 1940, the Brazilian Government was committed to a free exchange rate, but - as we mentioned before - this resulted in a disadvantageous feature in the after-war period, and useless mechanisms during the war. A more free exchange course was mainly an exigence from the international financial system and the North American trade partners of Brazil.

Figure 3.5
Industrial Production

The sharp price oscillations which occurred throughout this period were certainly expressions of deep re-allocations at the international level and consequently also in international regional terms. The relationship and even dependency of the domestic economy on the international developments may thus explain, partly, the strong price fluctuations at home.

Since the substitutive expansion depended much on the domestic manipulation of market prices, the changes introduced after the World War II in the domestic economy must have expressed the interplay of domestic policies and changes in factors' price abroad. The oscillations in the domestic industries' branches also reflected such non-economic components as climate difficulties, as well as economic phenomena such as credit squeezing for specific branches, etc.

The exchange liberalization in the after-war years proved to be premature, at least to the extent which it was promoted. The worsening situation, was caused by the war rationing, price controls and so on, were reflected in a decline of the living-standard for the population's low-wage groups. Notwithstanding this circumstance, the disposable income did not appear to sink, which may be interpreted because of the favourable domestic set of expansive forces in action, during the war period. These forces were in interplay with the Governmental action and annulled the depressive effects of the war.



On the other hand, the Public authorities used the favourable circumstances to stimulate the amount of savings and private investment since the inflation rate was the unique counteracting factor in the economy. An adequate amount of additional savings raised the efficiency of the private sector and did not require an intensive State engagement in new ventures. To promote this measure, the Public authorities stimulated a low discount rate, after the option they presented for the developmental course in 1948. The insistency, both during the war and after the readjustment of 1947-48 on a low rate of discount and consequently in a low cost for loans, characterized a common route for the governmental action in the period toward capital formation. The rising demand for capital imports and the establishment of the multiple rate, characterized the expansive situation in the domestic economy, and also pointed out the above mentioned kinks of 1947-48 as typical inventory readjustments.

As we mentioned before, the imports in the period 1939-1945 show a clear scarcity on the part of supplies. The source of this was partially represented by the difficulties from the trade reallocations after the crisis of 1929-33 and partially developed by the inventories' demands which proceeded World War II. The trade of which Brazil was maintaining with the Axis powers was abandoned, under North American pressure. The war created new difficulties and made acute the older ones. Domestic priorities could not be taken into consideration abroad, especially in consideration of the economic recession and after the military struggle.

C) Favourable Circumstance to Import Substitution:

In relation to these aspects, the North American Government advised the Brazilian authorities to increase their ability in substitutive industrialization. This trend for supporting industrialization in Brazil was later reversed, in the end of the war, by the North American Government. Thus, in the post-war period, while adapting to the new international requirements, the Brazilian authorities found difficulties carrying out the previously planned rate of expansion. Despite these political changes, and some vacillation at home, the industrialization effort was at last implemented by the Brazilian Government.

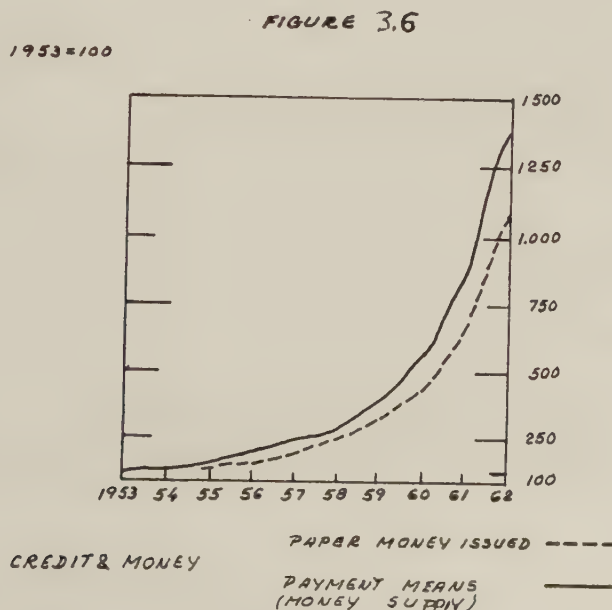
In the period 1939-1947, the prices of imported raw materials and capital goods to the consumption of manufacturing industries grew respectively 230 percent and 102 percent (20). These figures, when compared with others of the post-war period, show that the prices became much more stable in the post-war phase. This may also be interpreted as a source of higher domestic industrial performance. Of course, the more favourable development of the imported prices contributed to a more adequate pace of capital accumulation.

Since a correspondingly larger volume of imports was available in the post-war years, this contributed to a depression - to some extent - of the costs at the domestic level, and reduced in this way the effects of inflation.

Finally, the agricultural export prices rose notably in the period 1939—1952, due in particular to the influence of coffee export prices, which represented around half of the Brazilian exports during the 1940s. The rises of the export prices expanded the purchasing power of Brazil abroad, while domestically, the authorities were following a policy which committed a decreasing amount of exchange values to the operation of the export sector. (21)

The increase in export prices was reflected in the rise of prices of other agricultural commodities. These increases in prices contributed to inflation as the primary commodities fluctuated greatly during the period. This inflation was the result of the weight that the exportable agricultural commodities had as inducers of price increases in the Brazilian agriculture (22). The domestic inflation must at least have reached 400 percent in the period 1939—1952. (23)

Thus, the relative stability of the exchange rate indicated, in practical terms, was an overvaluation of the domestic currency. This over-estimation financed the consumption of imported goods at the expense of the gains in exports. The unequal access to underpriced scarce resources was the basis for the manufacturing expansion in capital formation during the period. It consisted in particular in a relatively sharp protection for the manufacturing activities in the period and in general also as a shelter for the urban activities. This process is compatible with the Latin American mechanisms of import substitution. (24)



D) Domestic Changes in Income and Savings:

Table 3.1
Ratio of Cash and Deposit Holdings to National Income.
(Monetary Values in current Billions of Cruzeiros)

(1) Year	(2) National Income	(3) Cash Cur- rency (Dec.31)	(4) Deposits (Fixed Terms)	(5) Ratio of Cash & Deposit Holdings to Nat. Income	(6) Index of (5)
1945	124.102	3.214	8.513	0.0945	100.0
1946	151.377	3.674	8.301	0.0792	83.8
1947	163.398	3.517	8.286	0.0722	76.4

As a result of the pressures of demand, inflation and price fluctuations, the individuals' liquid asset holdings were quickly reduced in the post-war period. In table 3.1, we can see how rapid the reduction of these holdings was in the 3-year period after the war. This may be interpreted as a hidden reason for the decrease in the savings ratio in relation to the years after 1948 (see table 3.2.) In order to shed some light on the evolution of the savings mechanisms while the economy was experiencing a reduced influence from the world market, we will consider a deposit-function model (25).

Let us first consider some conditions:

- (a) An account-system of general equilibrium;
- (b) Conventional symbols to represent the macro-variables in the system;
- (c) A deposit-function model which is part of the system;

Then we can write: $S_D = a + b Y_{nag}^G + c Y_{ag}^G + d Y_d^N$

where the symbols corresponds to the definitions:

S_D Deposits in all banks (Dec., 31)

Y_{ag}^G gross agricultural income

Y_{nag}^G gross non-agricultural income

Y^G gross income

Y_d^G gross disposable income

Y_d^N net disposable income

The account-system may have its relationships represented by means of current algebraic manipulations, as is conventionally accepted.

Table 3.2.

(1) Year	(2) G.N.P.	(3) Personal Expenditure	(4) Disposable Income	(5) Propensity to Consume (3):(4)	(6) Savings (4)-(3)	(7) Personal Savings Ratio (%) (6) : (4)
1939	155.0	128.8	143.6	0.8969	14.8	10.31
1940	155.3	126.8	141.4	0.8967	14.6	10.33
1941	149.6	119.0	133.8	0.8894	14.8	11.06
1942	151.8	118.3	132.1	0.8955	13.8	10.45
1943	152.4	115.7	129.5	0.8934	13.8	10.66
1944	156.9	117.0	131.0	0.8931	14.0	10.69
1945	172.5	129.1	144.4	0.8940	15.3	10.60
1946	194.2	143.8	161.1	0.8926	17.3	10.74
1947	200.7	146.2	164.0	0.8915	17.8	10.85
1948	215.6	151.7	156.4	0.9699	4.7	3.01
1949	229.9	167.9	177.8	0.9443	9.9	5.57
1950	244.8	177.0	194.2	0.9114	17.2	8.86
1951	259.3	184.3	203.6	0.9052	19.3	9.48

Source: Fundação Getúlio Vargas and Anuário Estatístico, I.B.G.E., several numbers.

- In this case, other variables can be included, as for example:

S^N net savings
 I^N net investments
 L increase of liabilities outstanding
 C Consumption
 I^G gross investments
 H households
 ... etc.

If we can accept these conditions, then we can write several sets of relations which are in explicit or implicit accordance with the system of National Accounts.

For example: $Y_{ag}^G = Y_{ag}^N + D_{ag}$

Where D_{ag} is depreciation charges to agricultural operations,
 or:

$$Y_{nag}^G = Y_{nag}^N + D_{nag}$$

$$Y_d^G = C^N + S^G \quad \text{or: } Y_d^G - C^N = S^G$$

$$S^G = Y_d^N + D_{nag} - C^N$$

... etc.

Thus, the relation:

$$S_D = a + b Y_{nag}^G + c Y_{ag}^G + d Y_d^G$$

can be established as representing the deposit function of an economy. When, adjusting time-series over the period 1939—1947 to obtain the set of relationships of a deposit function, we obtain:

$$\bar{S}_D = 90.287 + 1.094 Y_{nag}^G \quad (\text{II})$$

$$R^2 = 0.7009$$

$$t = 4.0501$$

That means, the non-agricultural gross income in the period is strongly related to the evolution of the deposits in all banks (Dec.31).

The result becomes more interesting when compared with a similar relationship between the gross agricultural income (also in nominal terms) and the dependant variable nominal deposits in all banks:

$$\bar{S}_D = 43.477 - 0.0825 Y_{ag}^G \quad (\text{III})$$

$$R^2 = 0.9668$$

The comparison of the two regressions (II and III) seems to support our hypothesis that an important part of the tertiary activities were reallocated in the period 1939--1947, from the previous function of complementarity they had presented with agriculture (especially production and exports of coffee, cotton and cocoa). This reallocation was produced toward a growing complementarity with the secondary sector.

Let us now add the performance of the gross agricultural income to model (II) in order to explain the deposits behaviour through the resulting deposit function:

$$S_D = -433.377 + 0.034588 Y_{nag}^G + 11.25629 Y_{ag}^G \quad (IV)$$

$$S_{Y.12} = 24.91$$

$$R_{Y.12}^2 = 0.8907$$

$$S_Y^2 = 246.137$$

We can conclude that the inclusion of the agriculture income increases the explanatory degree of the deposit function (see also equation II), which is a reasonable compatible with a high correlation between the product and income components and the savings mechanisms, here expressed by the deposits function. The particular factor to point out here is a high coefficient of determination, which attributes approx. 89 percent of explanatory power to the plane of the regression.

Our next step will be to include the increase of nominal disposable income, also yearly-based, and see how it would influence the model (IV):

$$S_D = 401.449 + 0.0730871 Y_{nag}^G - 9.3791 Y_{ag}^G + 0.400704 \Delta Y_d^N \quad (V)$$

$$S_{Y.123} = 6.388$$

$$R_{Y.123}^2 = 0.9838$$

The general quality of the model increases greatly with this regression hyperplane, and now 98 percent of the explanation may be practically interpreted as leaving unexplained only at random- and-chance phenomena. This means that the deposits function model (V) explains satisfactorily the hypothesis we previously presented, i. e., that structural changes influenced the orientation of domestic savings and investment policies. When the domestic savings became home-market orientated this fact contributed to the importing-substituting type of economic development characteristic of the period under study.

If we consider the partial coefficient of determination r_{Y1}^2 , it will be a simple coefficient of determination for the variable "dependant" and " Y_{nag}^G ", is completely ignored.

$$r_{Y1}^2 = 0.7011$$

This result is approximately the same we obtained in (II).

Let us now consider "depedant" and " Y_{ag}^G ", " Y_{nag}^G " being fixed. We then have:

$$r_{Y2.1}^2 = 0.6217$$

By including the four variables, the strength of association between "depedant" and " ΔY_d^N " is:

$$r_{Y3.12}^2 = 0.8518$$

This seems to affirm the multi-associated strength of the model to explain the savings behaviour. The third independant variable " ΔY_d^N " has propotionally reduced much of the variation still to explain. Thus, the four variables model is adequate due to its used hyperplane. Incremental disposable income increased the quality model (IV) by some 85 percent when included, which is good in relation to the implied variables.

When additional changes in disposable income, in nominal terms, do not always correspond to effective increases in real disposable income (see table 3.2) - as has been historically the case in this period - it is possible to relate these nominal income changes to changes in the composition and distribution of income and, consequently, also to changes in the structure of demand for commodities.

In a process of structural changes, it must be envisaged that some branches or individuals are dissaving while others can be saving even more than before.

The sustained low coefficients of non-agricultural income in relation to what could be expected (while lower than agricultural income in IV and higher in V) can be explained through the hypothesis of the savings transference, which seems to agree with the developmental trend in the urban activities while the non-urban activity was declining or stagnant.

3.4. An Interpretation

After the difficult situation which occurred in the country as a result of the domestic and international developments of the thirties, it was possible to produce positive advancements which may be characterized as follows:

(1) A structural shift from rural to a non-rural society and economy. While the bulk of the population was still living in rural areas, urban and urban-connected activities experienced an extensive development in this decade, so as to enter the fifties as the commanding forces of the country. As was once characterized by Prof. Simon Kuznets:

"The shift away from agriculture is perhaps best known and has led to widespread identification of modern economic growth with industrialization, by which is usually meant the growing absolute and relative volume of industry as contrasted with agriculture. The causes, implications and corollaries of these shifts in industrial structure are also for the most part familiar". (26)

In this sense, industrialization also brought effective modern economic growth in Brazil, and due to this, the labour-intensive character of the industrialization it contributed to in the forties, made the expansion of the urban rates of employment and urbanisation. The country experimented in extensive transformations, which were most visible in the Brazilian Southern Region.

The Government action and the Government-promoted economic policies performed a central role in the period, with Banco do Brasil being responsible as commercial bank for the maintenance of the agricultural export sector and a considerable part of the financing of the then ongoing industrialization (27). The Public Authorities generated not only a favourable domestic credit, they also applied different exchange policies which recognised the role of substitutive industrialization. As a part of this policy, a State-controlled sector of the economy was created and expanded considerably in the forties. This policy was followed up, in its basic lines, by the subsequent Government Administrations in the fifties.

(2) One particularly favourable aspect in the forties was undoubtedly the fact that such structural changes were basically financed with domestic resources. This was favoured both by the fluctuations in international trade and the effect of the World War II. Due to the excess capacity of the primary sector, - characteristic also of other Latin American economies specialized as primary exporters - the country could use the decreasing exchange gains of exports to finance industrialization and modernization. While the observation is less orthodox, the induced savings result from unused primary capacity were large enough to finance industrialization in the period. The war also created favorable political conditions for industrialization and for the purchase of capital goods, equipment which would otherwise have been difficult to obtain.

(3) The above mentioned mechanism of income transference not only benefitted secondary activities but also urban activities in general since it was reflected in cheaper import of foodstuffs and capital goods, which were principally consumed in towns. Thus, the momentaneous collapse of the international division of labour in the thirties was used at home - in the Brazilian case - to reduce the influence of the forces which represented the international division of labour and to promote modernisation through industrialization. In this process, the existence of a perennial cash crop position based on few products (mainly coffee, cotton and cocoa) contributed paradoxically to support industrialization and the industrialization forces in the task of squeezing the importance of the primary activities.

REFERENCES:

- (1) Harry G. Johnson, in "Inflation and The Monetarist Controversy", Amsterdam-London, 1972, p.77.
- (2) This characterisation has been previously used by the author in "História do Brasil", SP, 1966.
- (3) Gastão Vidigal was Dutra Administration first Finance Minister, (Feb.1 — Oct.1946); after him Correa e Castro was Minister until June 1949, when substituted by Guilherme da Silveira was more close to easy credit, while Correa e Castro promoted strong corporations, foreign capital investments and export-oriented policies. On the issue see R. Kahil's work, "Inflation and Economic Development in Brazil", 1946—1963, Oxford, 1973.
- (4) This follows the explanatory lines of the Government officers responsible for economic decisions. See Correa e Castro, "A Guerra e o Desequilíbrio Economico", SP, 1949, pp. 60-73.
- (5) It is adequate to suppose that the Brazilian Government expectation was the U.S. financial support to industrialization policy as a result of trade liberalisation in the post-war years. See Correa e Castro op. cit, pp. 4-5.
- (6) See on the issue R. Kahil's " Inflation and Economic Development.."op.si
- (7) For an analysis of the 1949 devaluations see R. Bailey, "Sterling Balances", Midland Bank Review, May.1964, London. Also M. Alves, "Economia e Revolução", RJ, 1958. and Ivar Rooth, "Devalveringen och Den Ekonomiska Politiken", Lund, 1949.
- (8) Since the North American market was the world greatest demander of coffee, the trade between Brazil and U.S.A. should have to increase as a result of the Brazilian coffee expansion abroad. See Institute For Inter-American Affairs, report, 1950.
- (9) By "parallel market" we mean the existence of a simultaneous exchange market, non-official, which is tolerated by the Public authorities.
- (10) See on the issue M. Shinohara, "Relative Production Levels of Industrial Countries and their Growth Potentials", Weltwirtschaftliches Archiv, Band 86, Heft 1, 1961. Also Hollis B. Chenery, "Patterns of Industrial Growth", The American Economic Review, (AER), Sep. 1960. and Alfred Maizels, "Industrial Growth and World Trade", N.I.E.S.R., London, 1963, p.384-5 and p.415-6.
- (11) This was also the point of view of M. Alves, op. cit., p. 66-7.
- (12) For a detailed list of the legal measures to promote industrialization and its chronology, see W. Cano and L. Cintra, "Algumas Medidas de Política Economica Relacionadas à Industrialização Brasileira", 1874-1970, DEPE, Unicamp, 1975. See also chapter IV on the issue. Under Vargas; this plan expanded the scope of the Government economic action.

- (13) See "O Banco Nacional de Desenvolvimento Economico", RJ, 1954, p. 2.
- (14) According to information to journalists by the Chief of Army Headstaffs, "entrevista com o Gen. G. Monteiro", Diário da Noite, Nov. 1945.
- (15) See O. Ianni, "Estado e Capitalismo", SP, 1966.
- (16) This analysis, whereas the subsequent paragraphs were based on comparative material of I.B.G.E.
- (17) See especially Anuário Estatístico, numbers XI to XVI.
- (18) This is also the point of view of C. Furtado and I. Rangel, 1959.
- (19) See reference (7) and also "Relatório do Banco do Brasil", 1951.
- (20) Estimated from information of Banco do Brasil, CACEX (export division) and statistical yearbooks.
- (21) See C. Furtado (1956, 1959) and N.W. Sodré (1964); respectively "Formação Econômica do Brasil" and "História da Burguesia Brasileira".
- (22) On this mechanism see E. Bacha, "O Café e a Economia Brasileira", RJ, 1976 and also "An Econometric Model for the World Coffee Market: the Impact of the Brazilian Price Policy", New Have, 1968.
- (23) According to the economist E. Gudin this was an outstanding falsification of the Government as it computed the prices' variations from the lists for price control and not from the effectively traded prices in the markets. According to him, thus, set this figure a 30 percent higher in the period. E. Gudin; conference pronounced, at the Universidade do Brasil, May 1954.
- (24) See C. Furtado and also M. Conceição Tavares, among others.
- (25) Similar models were previously used, among others by M. Kalecki (1938, 1951), Yasuhiko Yuize (1960) and Toshiyuki Mizoguchi (1964).
- (26) Simon Kuznets, "National Policy for Economic Welfare at Home and Abroad N.Y., 1955, p. 32.
- (27) In the forties there is no correlation visible among the evolution of the balance of payments, exchange reserves and variations of money in hands of public, as checked by empirical methods. Furtado and Malan pointed out this hypothesis primarily, while Malan explained it through the fact of the purchase by the Brazilian Government of foreign assets in Brazil. See Malan inter alia, in, "Política Econômica Externa e Industrialização no Brasil", 1939--1952 IPEA. RJ, 1976, p.36.

4. THE SECOND ADMINISTRATION OF VARGAS (1950-1954).

"The industrialization drive should have the purpose of - from the part of the State concern - liquidating the Colonialism and making the country both economically and, consequently, politically independent from foreign influence. This purpose has not yet been achieved. From the social concern standpoint, the industrialization should be oriented to supply the large population masses with better food, clothes and housing, with thus a higher standard of living. This movement only became near its social goal during the war".

(World War II) (1).

J.F. Normano

4.1. Introduction.

Vargas, who supported his former Defense minister, Dutra, when this was President candidate, was after Dutra elected as, in part, result of the bargain, and thus he managed to come back as legal President.(2)

Despite the broad differences in philosophy that then existed among the main authoritative politicians, Vargas was able to achieve a temporary majority to support the developmental policies under the State coordination and orientation. This allowed the Public regulatory powers to be reactivated in order to proceed with further measures of industrialization. Until this period the Public Authorities had developed a basic capacity to promote expansive policies and already at that time they manipulated a large range of alternative policies to achieve the supposed improved reallocations in the market. It was also in this period that the ideas of the Economic Commission for Latin America (CEPAL-ECLA, U.N.) became widespread through practical proposals for planning implementation, trade improvement, industrialization and regional integration in Latin America. Many of the ideas developed in ECLA represented also a generalization of the Brazilian experience of growth and they may be considered as reflecting also the advancements of the domestic Public policies at the level of implementation. (3)

4.2. Effects of the Korean War

A) Import-Substitution Industrialization.

This effort to coordinate the domestic process of growth contributed to the cooperation between ECLA and the Brazilian government. This also coincided with favourable market circumstances abroad, which we have referred to, were stimulated by the demand of the Korean War. (4)

Thus, a growing demand benefitted the Brazilian exports, especially of coffee (5). The exports were stimulated to grow more rapidly and were financed by the new facilities engendered by this external favourable juncture. This juncture for improved coffee prices also produced a race to coffee plantation, with a growing supply of coffee especially in the late fifties (and also from other parts of

Figure 4.1 Long Swings of GNP (in 1949 real prices): Brazil, 1860-1980
(Original Series divided by nine years moving averages.)

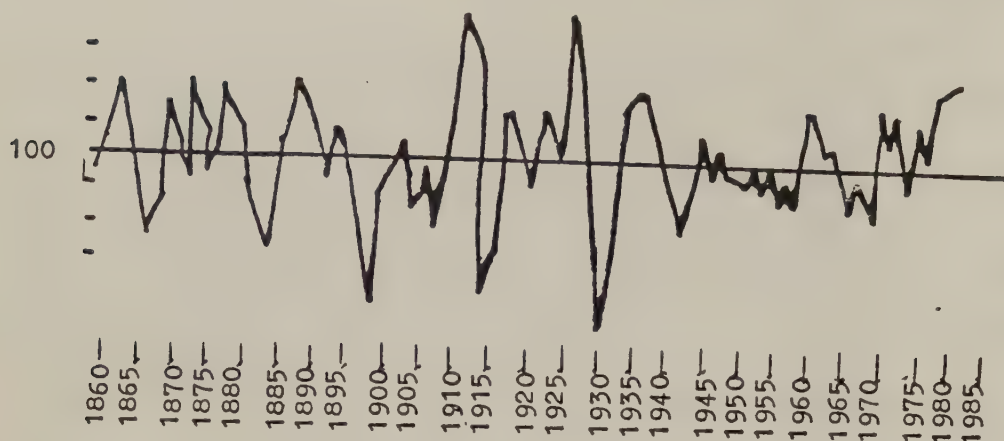
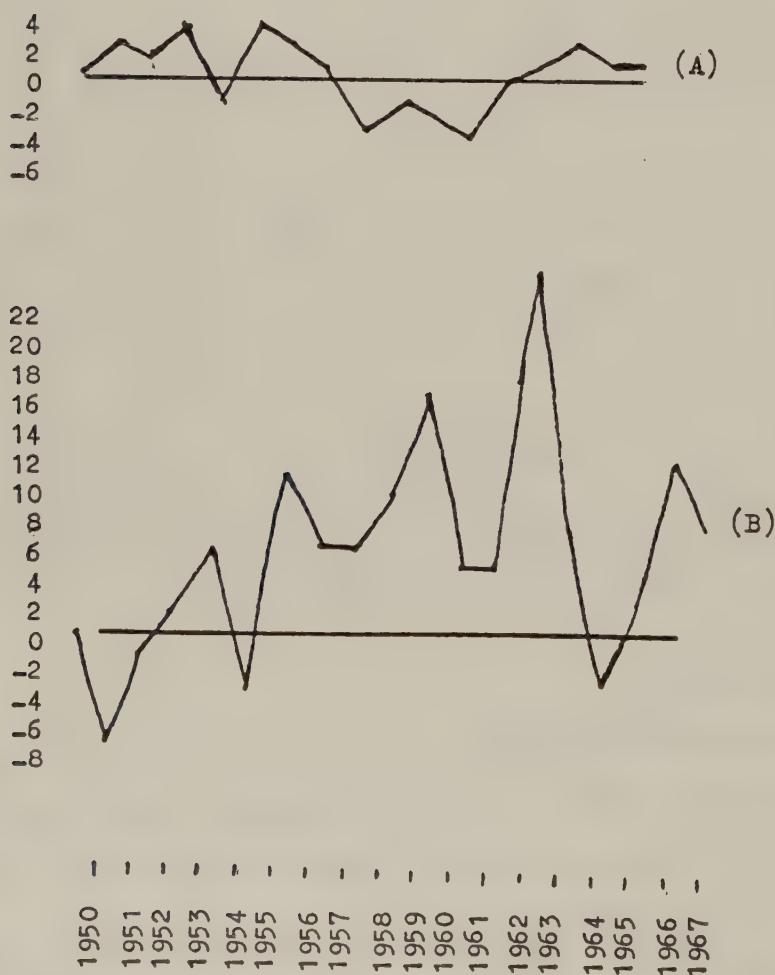


Figure 4.2 O.E.C.D. and Brazil Internal Demands. Rates of Variability Obtained from secular trend. Real Values. 1950-1967.

(A) Demands of OECD

(B) Brazil Internal Demand



Source: DGE, FIBGE, Banco do Brasil for Brazil; OECD: National Accounts Statistics.

the world). This growing supply would later bring as a result falling prices and depressed exports in the late fifties and sixties.

B) - And Favourable Foreign Trade.

In association with the rising domestic costs and prices, the other Brazilian export commodities, which purchase prices were determined abroad, entering in fluctuation, and some even presented unfavourable performance. The rising costs were both the result of changes in the domestic economic policies and the effect of agricultural conditions and imbalance in the capital flows.

In general terms, the accumulation of surpluses in the balance of trade in the 1950s was rapidly consumed by expanded capital outflows. These surpluses resulted in the favourable coffee export prices. The position of the trade balance was negatively defined when the trade depression of 1958--1962, became characteristic and coffee, without protection, suffered from the effects of excessive supply. An important element in this trade deterioration was also the extensive expansion of the imports. These imports comprised both durables and non-durable commodities.

The demand of the Korean War contributed thus to postpone the effects of the gradual deterioration of the agricultural sector, through improved demand of primary products and expanded coffee prices. Simultaneously, the gains of foreign trade allowed the country to pay for increased capital exports in the period and to maintain, aside from this, a considerable import capacity through improved purchasing power abroad. This improved purchase power was partially improved in the imports of equipment and inputs which were available as settled capacity and inventories during the sustained industrial expansion observed in the period.

4.3. Domestic Policies

A) Liberalization and Preferential Exchange Mechanism.

The Public authorities attempted to control the expansive imports through the establishment of mechanisms which attributed preferential treatment for acquiring foreign exchange. Since the agriculture was not diversifying and expanding as should have been desirable and as the industrialization process demanded growing amounts of inputs and equipments, the problem was difficult to overcome.

Among other import items, oil was one demanding growing exchange values in the fifties. Thus, the creation of a domestic State-controlled oil company was an important step. The effort to produce some oil in the country originated the creation of Petrobrás. The scarce electric power generation and distribution demanded in the country large consumption of less economical thermic sources. Also, much of the oil was demanded for the plants to generate electric power, and the Government appreciated the possibilities to use the hydroelectrical potential of the country. Since considerable resources had been advanced to the private corporations which controlled the domestic market, without the desired resulting effect on capital imports and settlements of productive equipment, the Government entered this market through the creation of a State-controlled company. The creation of

Eletrobrás was made in order to raise resources to expand the branch, through the establishment of local operating plants and companies.

Between 1948 and 1953, the volume of domestic produced capital goods rose 77 per cent, and the consumer goods production rose some 35 per cent. All this expansive effort was demanding an increase in the electric power supply at a yearly rate of 14 per cent.

The Public policies toward sustained expansion of the heavy industry was thus producing its effects. It is important to analyse this point, because the expansion of the heavy industry has more commonly been interpreted as an ulterior phenomenon. In fact, this sectoral expansion was the foundation of the situation for the surge of 1957--1962.

The changes into the productive structure were coming at a faster pace than it had been expected and a question should soon be raised; what kind of economic policies should be able to prevent the strong fluctuations? During the fifties, the agricultural sector became still comparatively more in lag than it had been during the labour-intensive manufacturing expansion of the forties. The cause was both the changes in the structure of the relative demands and also the visible stagnation of the agricultural activities, with the major exception of coffee. Also some unproportional branch developments were appearing in this period, as an expression of unequal financing of the activities, and this phenomenon should become clearly visible in the more expansive period of 1958--1961.

B) The Relative Stagnation of the Agricultural Sector.

It must be understood here, that the amount of finance which the agricultural activities benefitted from in the last 30 years had clearly been insufficient. This may be related as the cause of the agricultural lagging performance, together with periodic capital drains from this sector, to more profitable activities then in run. Of course, under the trade developments of the late forties and early fifties, coffee could not be included in this rule and sometimes also cotton profitted by prices movements. In fact, the development of the capitalistic structure was closer in connection with the urban activities in the period. The cost of capital was higher to agricultural investment, except perhaps to coffee and cocoa. Due to the scarce financial resources of the country, especially when the capital outflows accelerated in the post-war time, the penetration of the capitalistic methods of production was following a "natural" process, in relation to agriculture: it remained as a primitive market in the most parts of its branches. Needless to say, this resulted in one part, of the traditionally extensive character of the primary activities, on the other part, from the bias of the policy-makers who were faced with the need for establishing priorities (6).

Thus, the agricultural sector was expanding at rates which were inadequate, and in the future it was allowed to suppose that the agricultural performance could constitute a real bottleneck in the process of growth.

As we mentioned before, the sluggish character of this primary expansion was more pronounced in some exportable commodities, when considered the main exception of coffee in the fifties. The stagnant productivities reflected the changes

which were in process since the international crisis of 1929. The following table gives us some information on this, in relation to the early fifties:

Table 4.1.
Agricultural Production: Physical Index.

Year	Orientated to the Internal Market (1)		Orientated to the External Market (2)	
	1,000 tons	Index 1948 = 100	1,000 tons	Index 1948 = 100
1951	24,525	104	1,616	108
1952	25,055	106	1,828	123
1953	26,366	111	1,704	114
1954	28,837	122	1,669	112
1955	29,717	126	1,847	124

Source: Banco do Brasil

- (1) Production consumed almost entirely within the country: potatoes, sweet-potatoes, maize, manioc, unshelled rice, wheat and beans.
- (2) Production which is mostly exported: coffee, raw cotton, cocoa, sisal fibre, carnauba wax.

It is visible that the "agricultural problem" was constituted by a low rate of investments. While the output (1) in table 4.1. expanded at an average annual rate of 4.9 per cent, the output (2), orientated thus for exports, grew at an inferior rate of 3.5 per cent, i.e. a rate which was some 45 per cent less than desirable to compete abroad. In the immediate future, this inadequate amount of expansion should have to reduce the domestic competition abroad and should, thus, be contributing to coming shortages of exchange values.

As we have expressed in the previous section, as an effect of: (a) relative maintenance of cruzeiro exchange value; (b) exchange re-adoption of controls (1947); (c) rising demand for coffee and cotton abroad; resulted in that the purchasing power of the country expanded, coming to its highest point in 1954. The additional demand of the Korean War stimulated the coffee prices and, despite the other agricultural prices which were not developing favourably, the improved coffee prices counter-balanced the negative movement in the prices of other commodities.

The protective effect of this situation was reduced - when in reference to equipments' import in particular - with the adoption of the new exchange policy of 1953. Since January 1953, the exchange priority for capital outflows was guaranteed to foreign corporations, and the Instruction Nr. 70 of SUMOC, introduced the direct trade of exchange, the 5 categories of SUMOC's Instruction 25 (1947) were eliminated. This exchange liberalization reduced thus the capacity of the domestic

industries to import equipments; and the effects would later conduct to the solution of capital imports through association, as available in Instruction 113. Simultaneously, a part of this reduced import capacity in equipments was hidden by the momentaneous availability of foreign exchange, as a result of the coffee price developments that we mentioned before.

C) The Gradual Deterioration of the Brazilian Foreign Trade in the mid Fifties.

Since the rising coffee prices in the period 1948—1954, provoked strong reactions abroad to reduce this trend, the Brazilian authorities used different mechanisms to sustain the coffee prices. Simultaneously, some effort was done in order to improve the trade position of other export commodities. By the means of Instruction 112, the negative developments of 1955 were partially counter-worked. With the instruction SUMOC (superintendency of money and credit) were changes introduced into commodities' categories, with substantial increases in bonuses on exports. This probably eased the selling of export commodities abroad, but the scale was not adequate in order to balance the decreases in perspective to the export values. The low rate of the agricultural expansion was revealing the fact that this sector was subject to use of an extensive character, and therefore considerable investments should be required to raise the competitiveness of the exports; since the changes in the trade abroad were irreversible. The average rate of annual growth was then (as referred to before) ca. 5 per cent for the domestic-oriented production and about 3.5 per cent for the exportable commodities. If we exclude coffee from this export list, the development would still be unfavourable. The domestic orientated output was comprising both the direct consumption by the households as well as the manufacturing demand for agricultural production (7).

In relation to this aspect, the greater the rates of the domestic-orientated production were expressing, the greater became the rates of the domestic manufacturing activities, especially when in reference to the food processing industries.

The Brazilian production for export was growing, at the same time, through rates comparably lower than those of the world demand. Of course, coffee was the only exception. This can be explained both in terms of unplanned domestic prices for the export crops and also of climatical difficulties. Another explanatory element was desinvestment. The desinvestments were resulting from the low remuneration that the producers could receive. The components of this low price were: (a) excessive squeeze of the producers by financing and middle-men; (b) low price of domestic wholesale to traders; (c) inadequate technological assistance.

The reduced purchasing power of the primary sector was contributing to stimulate the shift toward domestic-orientated activities. Thus, the domestic competition between the primary exporters and the domestic-orientated producers - while being reduced in this period - was contributing, in the long run, to make the investments into primary production to export less effective. Simultaneously, with particular emphasis to when the cruzeiro was overvalued, the gains of the exports were used domestically to finance the substitutive industrialization.

Thus, the overvalued cruzeiro made the exports less profitable to larger investments (marginal rate of return) and this possibly reinforced the existing trend for shifting to manufacturing expansion.

These above mentioned changes into the role of the export sector seems to confirm the reallocative policies applied by the Public authorities as expressing some permanent ideas or goals, when related to the exchange and credit mechanisms, despite the eventual changes of Governments and Public staffs (8).

Table 4.2.
Prices of Tea, Coffee and Cocoa.
Index. Average 1933/38 = 100.

Years	Tea		Coffee	Cocoa
	London	Calcutta		
Average				
1925/1929	133	128	228	207
1930/1929	92	72	114	102
1948	..	270	279	688
1949	..	319	331	371
1950	..	338	530	553
1951	327	300	565	614
1952	273	230	564	614
1953	326	326	609	640
1954	474	482	815	997

Source: Banco do Brasil

Note: Tea: All types, London / pence per lb.

Coffee: Santos 4, New York / cents per lb.

Cocoa: Accra, spot, New York / cents per lb.

4.3. Expansive Policy:

4.3.1. Public Investments

A) Trade and Price Fluctuations.

The nominal price raises of some primary commodities were expressing the reactivation of the economies abroad. Notwithstanding this fact, the domestic responsiveness to the rises in international prices seemed to have decreased in the period. The explanation may be found in the shift in the domestic market.

The 3 most consumed beverages in the world (coffee, tea and cocoa) are listed in table 4.2. and this is supposed to contribute to the explanation on this aspect. As we see in the table, the price fluctuations, while strong, allow us to observe nominal raises in prices. Tea, for example, expanded in the period 1951-1954 at an average rate of 13 per cent. Coffee, New York, ca. 13 per cent and cocoa, Accra and New York, ca. 17 per cent. It seems to be that these raises in prices were responses to a decreased investment that these beverages experimented

in their productive capacity in the thirties and during the World War II. It is legitimate to suppose that the effects of the previous desinvestment were still influencing the prices in the post-war demand (9). The policy which may be presumed from this fall in investment, was that the investments were reduced or avoided due to the stagnant or falling demands abroad and this conducted to a new behaviour, as the low profile of investments which we have detected in the post-war years. This reduced investment was compensated by surplus resources in the banks or a direct shift from producers to the expanding substitutive activities, in the Brazilian case (10).

Thus, the agricultural lag to cover the demand abroad may also be interpreted as a kind of reaction to problems once found in where to place excess exportable goods, and only gradually this trend was reversed in the post-war. In fact of the observed mechanism, we can report as a conclusion that the country's economy was no longer simply reacting as a primary producer economy in relation to the demand abroad; despite the fact that this economy was structured as mainly a rural economy, strongly dependent on the gains of a traditional export sector (11).

Moreover, the decrease of the export capacity of the country was a reflection of the domestic reallocations, with the changes in relative demand which are so peculiar of growth processes. This decreasing importance of the exports, and by extension of the agricultural sector, may have corresponded thus to the transference of scarce resources for the consumers of imports and, by this way, toward the process of industrialization. The branches connected with this industrialization were showing a higher responsiveness to the reallocative character of Public policies and were expanding in accordance to them.

B) The Expansion of the State Sector in the Economy.

The last period of this second Administration of Vargas was oriented to expand the State sector of the economy, but also was attention given to the private expansion, especially with the creation of the National development bank, BNDE. This bank was able to operate with domestic and foreign resources and provided basic developmental credit to projects which were considered adequate. Aside from the creation of Eletrobrás, Petrobrás, expansion of the railway equipment output, through a new plant, FNV, etc., the record of developmental measures was considerable (12).

The fact which seems to explain the formation of this State sector in the economy was the drive for industrialization, i.e. since the Private sector avoided excessive big projects and too much risky innovations, due to the traditional capital scarcity, the Government used a part of the credit creation to implement the State-controlled corporations. In fact, through the financing of these big projects the Government was also convincing the Private sector of near-coming higher profitabilities, and produced consequently a more dynamic investment policy in the Private corporations.

Despite some fluctuations in 1953 and political crises until 1957, the response of the Private sector was growing positively. For example, the government controlled oil enterprise, created by a law of 1953, began to operate in 1954 with

a production of 158,000 cubic meters of crude oil. 15 years later, it was producing some 10 million of cubic meters. The steel and iron output experimented also a strong expansion, which contributed to expand the networks of roads, the civil construction capacity, transportation, etc. This favourable pattern of expansion in infrastructural capacity and in durables was contributing to raise the employment level and stimulating other branches to expand the domestic supply (13).

Notwithstanding the Public efforts, and also due to broad fluctuations in the foreign trade, the domestic exchange gains were not expanding enough to pay for the increased demands of different nature. In this position, loans abroad had thus to be periodically available, a fact which also reflected in the inflation rate and in the domestic level of prices.

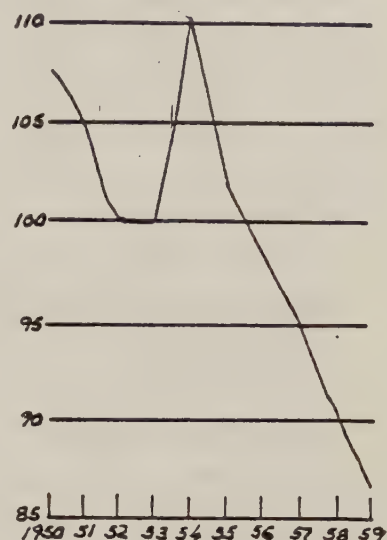
C) Investment Policies and Fluctuations.

A shortcoming in the current analysis of this period is the neglect of the fact that these investments produced in the fifties, were not completely maturated during the downswing which followed in the period 1963--1967. This swing has not been considered as an unavoidable adjustment phase (not in its extension - but as an event). Yet, the current opinion is to present the swing as a result of completely wrong policies, which is a too much subjective-matter (14).

The economic juncture was expressing at that time a favourable climate to additional import-substitution, and the Public authorities, with emphasized variation, followed this substitutive course. The fact that these policy-makers could understand this circumstance worked in favour of an additional expansion, and the adopted policies of industrialization were basically adequate to this purpose.

Economic policies can be adequately judged based on the effects that they were supposed to produce on the macro-variables. The level of gross national or gross domestic product may be increased mainly if their components are raised as a sum. Consumer expenditures, government spending, gross private investment expenditures, net export gains are the main components which contribute to the effectively measurable growth. An objective judgement can be produced when considering the increase of the macro-aggregates as a result of the expansion of their main components. If this expansion is obtained and the pace of the growth is steady, it must signify that positive results have been obtained. These positive results can generally be described as a development, for they largely consist of net struc-

TERMS OF TRADE INDEX



1953 = 100

* LATIN AMERICA VS. REST OF THE WORLD

SOURCE: IMF

FIGURE 4.3.

tural changes (15).

As a matter of policy practice, to forecast and/or predetermine the sense of a prospected policy is a rather difficult issue in economic analysis. A change in a component may be offset by a corresponding inverse change in some other component. The simultaneous consideration of all the known macro-components is a much more complicated matter, just because economy involves psychological and legal features that make unforeseeable - in a certain degree - the full reaction of the economic agents. This situation is more intensive in a small economy, largely dependant on exogenous factors (16).

D) The Mechanisms of Substitutive Industrialization.

Until this period in reference, the policy-makers of the Government had been learning about the basic mechanism of substitutive industrialization. They developed an array of tools which were used in different ways, but always assuring the drive for industrialization, and thus promoting a large reallocation in the market. The extensive use of this mechanism would have to produce some kind of fatigue in the growth mechanism, some degree of rigidity when changes were in need to be introduced and the possible signals for this change should be uninterpreted. During a certain period of time it would be difficult to accept the waste of the mechanisms as a fact, when it finally would have to come to a halt. This was possibly what occurred in the early sixties. Thus, it is quite clear that such a growth mechanism, after being gradually developed, would then be used in extreme, since it could be assumed as to be producing the expected positive effects (17).

The set of these economic policies consisted in the same array that has been applied in other parts of the world, but the domestic type of possibilities certainly contributed to the character of the mix.

The possible bottlenecks, when detected or prospected, were counter-worked by new measures judged adequate to avoid the cumulative downward movements. An important element in this policy was the control of the discount rates, which were supposed to form or shape the interest rates, thus with direct reflection on the prospected rates of return; another point was the periodic expansion and diversification of credit, to counter-balance eventual seasonal difficulties in branches scarce of capital or in order to support productive investments in others. The sustained credit acted as a stabilizer of the supply of the working capital in the market, contributing to lower the interest rates. The Banco do Brasil and BNDE were also financing projects which would expand the overall economic capacity in the future (18).

The importance attributed to the expansion of credit shows a peculiar concern of Vargas' policy-makers with the domestic capital formation and the reduced confidence this Government was showing in the extent of capital inflows. In fact, since the "Estado Novo", appeared this Public concern with the adequate measures to promote the growth of domestic capital, once the domestic profitabilities were showing large differentials; and, as a result, the capital exports could overcome the capital inflows and the domestic capacity to repay them.

It is obvious that during this period, with a relative effort to sustain

the price of coffee abroad and an expansive domestic credit at home, the combat against inflation was not seriously committed. The inflation, indeed, was performing a role in the process of income transference. Although contributing to transfer income from non-urban to urban activities, inflation in this period was also stimulating income concentration, in this case, in favour of urban-holders of non-waged incomes.

The policy of almost ignoring the inflation was considered as adequate since the expanding forces were prevailing on the downward-pressing forces. Thus, since in the early fifties the demand abroad was in expansion, then it was possible to ignore the inflation and place the focus in the potential expansive forces to grow. Conversely, in the late fifties, the recovery of Western Europe and the reorganization of the African supply of commodities was combined with the trade depression in the foreign trade of the Region in 1958-1962. All these unfavourable aspects performed as depressive forces and thus contributed to the exhaustion of the Brazilian gains in foreign trade. This was also signifying more expensive imports of capital, as well as of capital costs (19).

The policy implemented in the early fifties had the implicit view that the economic growth was a normal state of business. The Authorities were accounting for considerable rates of expansion, and this had an implicit hypothesis, i. growth brings a kind of stability. Despite the Government team, presented two groups quite different ideas, one with traditional views and the other more committed to promote expansive policies, the emphasis was toward the expansive action.

The description of these basic ideas points to the shape of the economic philosophy orienting the policy-makers. There is also evidence in several documents where additional measures for expansion were required, especially by the staffs who were more involved in the growth policies (20).

4.3.2. Overall Growth Policies

A) Expansion of the Domestic Market.

In addition, it should be pointed out that this Administration made an uncommon effort to sustain the income level of the workers, since the deterioration produced by the inflations in the domestic purchase power was large. This policy had been followed under strong opposition, in particular of the Private sector, which emphasized the costs approach of the problem. In general, the point-of-view of the Government has been interpreted as of a major concern to the consumption developments, since decreased wages should reduce the urban demand and, consequently, the drive for substitutive industrialization. Under the mentioned policies followed by the Administration, a clear complementary effect should exist between (a) expansion of production, (b) reduced domestic prices for imports and

(c) expanding consumption. The Government authorities were properly supporting policies to achieve developments in the domestic market.

Two points seems to have been taken into consideration when the Government was supporting the wages re-adjustment: (a) since inflations were unavoidable, then the remuneration of the factors should be made as steady as possible, through the movement of the nominal price rises. This point is interesting, because the argument should later be taken up again by post-1964 Administrations. (b) Monetary and fiscal policies should permit the money demand to grow in line with the supply.

(a) Sustained real proportional remuneration of the factors. - The basic line in this argument is; if there is a disequilibrium or branches unproportions, there is inflation and then will distortions appear. The goal of the monetary Authorities should be to assure - in the long run - a proportionately original remuneration of the factors. This should then be equal to "growth-cum-stability". The same hypothesis was later developed in 1966, when the mechanism of indexation was introduced to assure the individual's savings and financial assets.

(b) Expansion of money demand. - This hypothesis, which is in close connection with the previous one, makes it clear that since a given level of money supply is required when growth policies are adopted, then the fiscal and monetary policies must be oriented to stimulate the money demand. An active economy, with high turnovers and with high demands of manpower, inputs and also consumption pressures should thus ease its functioning with improved credit mechanisms in order to realize fully the production. A growing demand for money justifies a growing money supply. The interesting point in this argument is that it focuses on the money problem as one subordinated to the major goal of economic expansion.

B) Unorthodox Policy-Making.

The current supposition was thus that the policies to curb inflation should contribute to other difficulties or a recession, while an adequate set of economic policies would focus in the relative prices of the aggregate factors. The Government goal was thus to achieve a rate of growth close to the domestic potential, without emphasizing the inflationary bias of the economy.

Despite that all this process of change was developed under a strong political struggle, the pace of growth of the main branches was still supposed to be speeded up, according to the opinion of some policy-makers. This speeding-up policy would in fact be adopted later, in the period of Kubitschek Administration.

Vargas, who was overthrown by a coup-d'état in Aug, 1954, committed then suicide. This produced a sudden change in the governmental staff, but his successor Café Filho, while orienting for a more orthodox policy-making, avoided a radical change in the general expansive policies (21).

In order to reduce the influence of the State in the basic investments, new policies were implemented to stimulate Private investments. The Private sector was in need of additional imported equipment, since the exchange resources were under pressure after 1954 and the scarcity of exchange values was mounting. The Government oriented thus to a policy of association between the domestic Pri-

vate sector and some international corporations, making some of the imported capital goods included as foreign assets on the importer's side. Under SUMOC Instruction 113, issued in early 1955, it was authorized to make the importation of industrial equipment without exchange cover (through accounting payment), once the exporter could receive the payments in shares of the corporation which imported the equipment. This facilitated much the entry of equipment without immediate spending in exchange values, and developed the association between domestic and foreign corporations. A résumé of the expansion of the industrial branches in the period can be seen in table 4.3., while the expansion of foreign capital investments in 1956, as an example can be seen in table 4.6.

When looking at table 4.3., we observe that the industrial output did not expand much from 1954 to 1955. In fact, the rate was 6.2 per cent, what may be explained in terms of the political instability in that year and also due to the reduced performance of some branches.

In order to stimulate new rising individuals' savings, facilities were extended to the expansion of the financial market. Large Public financing and credit mechanisms were making capital resources more promptly available, with result in the sustained level of investment expenditures (22).

Table 4.3.
Industrial Production. 1945 = 100

Description	1951	1952	1953	1954	1955
Pig Iron	313	327	355	439	418
Steel	453	480	546	617	609
Rolled Steel	441	455	532	615	639
Coal	94	94	97	99	109
Inner-tubes for vehicles	358	353	394	456	431
Tires	313	356	391	447	476
Cellulose (1)	..	100	158	194	224
Cement	195	217	272	332	361
Paper (2)	184	185	205	221	241
Hides and Skins	142	134	142	143	157
Sugar	186	207	232	245	256
Lard (2)	113	112	112	120	125
Preserved Meat	138	135	137	140	148
Wheat Flour	136	123	179	138	146

Source: Anuário Estatístico, several numbers; Banco do Brasil.

(1) 1952 = 100

(2) 1945 = 100

In the period, the expansion of investment was both nominal and real, carrying to provide a large capital formation in 1951--1961. The steady demand for credit in the period can be observed as a sign of increased rates of return

in the economy. This growing profitability resulted from the expansion of the heavy industry, which thus contributed to an extensive growth of the light industries and the food branches. The persistence of the Government action contributed to an ulterior optimism and massive investments.

The Public involvement in transportation, infrastructural works and large hydroelectric projects reduced the periodic squeezes that the industrialization was previously presenting, especially in the areas of São Paulo and Rio de Janeiro, due to the most advanced stage of demand of the two localities.

3) Electric Power Generation and Industrialization.

The total electric power consumption grew 11 per cent in a year basis in the period 1952--1958, while the industrial consumption expanded in average at a 10.5 per cent rate per year in the period.

Since the industrial demand was in fact expanding at 14 per cent in an annual basis, the available volume of electric power was insufficient and the reduced supply should in consequence also be available both to residential and commercial consumptions, with an evident overall squeeze. The shortages in supply of electric power were expressions of a prolonged stagnation in the branch, and the rates which were then available domestically (58 watts of power installed per capita in 1958) were too low even compared with other developing countries. The electric consumption in the main industrial areas are stated in table 4.4.

Table 4.4.

Two-Year Electric Power Consumption by the Industry.
In millions of KWH.

Location	1955	1956	Increase in 1956 over 1955	
			Amount	Percentage
Municip. of Sao Paulo	1,118	1,359	241	22
Federal District	623	686	58	9
Valley of Parafba River	904	927	23	3
Total	2,650	2,972	322	12

Source: Statistical Yearbooks, "Anuário Estatístico", several numbers.

During the late forties and the fifties the Public authorities proceeded with considerable investments to expand the power-generating plants capacity and also to construct new ones and, in this way, they considerably increased the electric power supply. The pace of demand for electric power was indeed growing faster than supposed to before, when the Public authorities dimensioned the new

generating plants that now should enter into production. A partial explanation can be found in the reduced amount of coal produced in the country, and the small size of the oil supply. The power capacity of the country was, thus, presenting a growing reliance on the construction of hydroelectrical-type of generating plants, which require a larger time to enter into work. The country was in a position of growing imports of the energetic inputs, that consumed extensive exchange values, and reduced the possibility for other imports. Locally produced charcoal was massively used in the manufacturing industries, expressing consequently lower productivities. The introduction of new technologies, which were more energy-demanding, reduced the possibility of remaining at the previous inadequate levels of supply (23).

The small surpluses of foreign trade were not sufficient for both additional large imports of capital goods and fuels. Consequently, some domestic expansion should have to be made available in the two items. The rapid expansion of Petrobrás came to confirm the supposition of economical amounts of oil existing in the country.

On the other hand, the Instruction 113 played a positive role in gathering equipment which otherwise would not be available. Different elements in the economic policies, sometimes even contradictory in their intention, had been thus contributing in the same direction.

Aside from Petrobrás, another big push should be attributed to Eletrobrás. The purpose for the establishment of this electrical holding company was to develop gradually the domestic capacity. Eletrobrás would influence the smaller group corporations, in a complementary way; small corporations which were the dominant factor in the power-generating-and-transport branch. Bigger corporations should be able to assure the demanded amount of needed investments to the overall expansion of electric power generation and transmission facilities. The Government concern for controlling the branch is understandable, with basis on the extensive shortages that profit-orientated policies had produced in the market when lowering the investment capacity. The post-war expansion revealed how urgent the necessity was for submitting this Private investment policy to the interest of overall demand for electric power generation and, thus, providing the branch with the adequate Public funds. Simultaneously, the excessive reliance on the utilization of hydroelectric power resources should have to require Public control, due to the fact of the large maturation period demanded by these plants, and the high amounts of investment they also required.

The importance of the electric power-generating capacity can be understood with the study of table 4.5. In that table, we consider some regression equations. The total rated electric power in MW lagged one year is used to explain the output indexes from table 4.3.

From the analysis of table 4.5. elapses the conclusion that the most adequate relationships were obtained with the association to indexes expressing outputs with low or normal consumption of electrical power, while those indexes which required stronger consumption were less explained by the rated power variable

This fact allow us to formulate the hypothesis of an insufficient supply of electric power generation and distribution in the period.

D) Gradual Association with Foreign Capital.

With reference to SUMOC Instruction 113, which opened the domestic market to foreign association in the industrialization process, it improved the amount of imported capital goods.

These capital goods amounted, for example in 1956, to a value of ca.56 millions of current dollars, and they were destined in its majority to basic manufacturing as can be seen from the table 4.6.

Mixed feelings seems then to have involved the supporters of the growth policies, with reference to Instruction 113. Some interpreted this instruction as an additional development in the course followed by the 1953 liberalizations and conducted thus to an unavoidable and desirable expanded foreign participation in the industrialization process. Others considered this measure negative in the long run, since it was supposed to aggravate the capital imbalances and also the indebtedness abroad.

Table 4.5.

Total Rated Electric Power in Mw (lagged one year) as Explanatory Factor of the Industrial Output.

Least Square Regressions.

Description	a	b	R ²	t
Pig Iron	0.0404	297	0.4934	2.4015
Steel	0.673	260	0.4523	2.1267
Rolled Steel	0.184	143	0.5995	3.3495
Coal	0.0161	64	0.9707	58.2454
Inner Tubes	0.0676	254	0.3256	1.4655
Tires	0.139	100	0.6365	3.8015
Cellulose	0.131	-130	0.6260	3.6642
Cement	0.148	-32	0.4783	2.2961
Paper	0.057	86	0.7769	6.8428
Hides & Sk.	0.02	101	0.8324	2.4291
Sugar	0.056	106	0.5524	2.8759
Lard	0.014	87	0.8060	8.0156
Pres. Meat	0.0126	112	0.9159	19.7095
Wheat Flour	0.0043	135	0.0060	0.1343

Source: Table 4.3.

The advantage of capital goods' imports without the need for immediate outflow of resources lies in the fact that several branches were rapidly expanding and a structural demand for equipment was being squeezed by the inadequate supply. The available exchange values were constituting the bottleneck. As well as the reduced amount of inputs - since the production was expanding each year - constituted a bottleneck but this became to be more sensitive after 1955, when the Instruction was already in force. The decreases in both the export values and quantities demanded abroad were producing oscillations in the capital account, oscillations which soon evolved as a negative performance.

In relation to the Brazilian foreign trade, the extreme case of unfavourable performance was that of cotton, an item which fell from a second position and 200 U.S. million of dollars receipts in 1951, to a 6th position and only 40 U.S. million of dollars receipts in 1957. The extensive foreign trade deterioration coincided thus with accrued expansion of the domestic industries, especially with manufactures. Simultaneously, although the total purchasing power abroad was still expanding due to the inflows of foreign capital, the Brazilian foreign trade stagnation was making the base of this purchasing power gradually to be eroded.

Table 4.6.
Foreign Investments.
January / December 1956.

Uses	US \$ 1,000
Basic Industries	32,588
Agriculture and Cattle Breeding	585
Light Industries	22,489
Transportation	30
Communications	17
Total	55,709

Source: Banco do Brasil

4.4. Partial Conclusion

The Administration of Vargas paid attention to achieve stable rates of growth and employment, while also making attempts to high domestic efficiency. Under favourable trade conditions, when the coffee gains were associated with additional demand stimulated by the Korean War, the Public authorities introduced some mechanisms to improve the competitiveness and reduce protection. Later, when the trade gains were becoming reduced, these adjustments contributed to foreign association with the domestic process of industrialization.

Strong investments were made in typical infrastructural facilities, in

order to ease the costs for Private projects and raise the general trend for industrialization. The Government of Vargas was also presenting specific views on monetary policies.

These views can be interpreted as mainly structuralist, and even common to the ECLA approach. The mix was emphasizing that economic growth cannot be automatically obtained from stabilization policies and moreover: the changes in policies to promote growth should - if emphasizing stability - face persistent difficulties and even recession, since the distortions, being structural ones, are not removed by stabilizing policies. A subjacent hypothesis in the mix was that economic expansion does not prevent inflation, but requires continuous manipulation to feed the forces in the market and to use completely the domestic economic potentials.

While it is not possible to find a clear allusion to Keynesianism, in these references, the ideas are clearly "Keynesian". Furthermore, an interesting parallel development should be suggested by the fact that since 1933 the Vargas' assistants were "Keynesian" in their formulations.

In the period after Vargas, and perhaps due to the fact of political instability, the economic policies followed a more inflationary course. The rising capacity of the country to produce capital goods was already exerting some pressure on the consumers-good's side of the economy. With the creation of the National development bank was included into the Public financing capacity a gradual separation between: (a) operational financing and (b) credit for investments. This was made in order to reduce the pressure on the funds of the commercial banks. Political instability also was the origin for some additional Public budget imbalances, since eventually unexpected Public spendings were then mainly covered through inflationary money-issues (24).

In this sense, the so-called "Kubistchekian economic policy", i.e. systematic Public budget imbalances, appeared before Kubistchek was elected as president and before he was to hold office. The imbalances then existing had necessarily not to be solved by this inflationary course, a reason why we are pointing to this fact as a component of the general confusion in the period, with periodic political crises, etc. This turmoil was causing a loss in efficiency of the mechanisms in the hands of the Public authorities (25).

Along with this loss of efficiency of the Public authorities, in the period (1955-1956), there was a converse movement when considering the Private sector, i.e., it became more active and contributed to feed the upward economic trends. A certain euphoria was even connected with the election of Kubistchek for president, and this psychological factor certainly played a favourable role in the effects of the expansive policies, with the Government decision to construct a new Capital to the country (26).

REFERENCES.

- (1) "Por parte do Estado, o proposito do movimento de industrialização seria o

acabar com o colonialismo, tornando o país econômica e, conseqüentemente, também politicamente independente da influência estrangeira. Esse proposito não foi ainda conseguido. Do ponto de vista social, a industrialização se destinaria ao abastecimento das grandes massas com melhor alimentação, melhores roupas, abrigos mais apropriados e maior acesso aos confortos da vida. O movimento apenas se aproximou desse objetivo durante a guerra". J. P. Normano, in "O Desenvolvimento Industrial do Brasil", Digesto Economico, Mar. 1951, S.P.

(2) See on the issue M.W. Sodré, "Historia da Burguesia Brasileira", RJ, 1964.

pp.317-330; see also C. Furtado, "Formação Economica do Brasil" RJ, 1959. pp.236-237

(3) See M. Conceição Tavares and J. Serra, "Más Allá del Estancamiento", ELAE, Santiago, Chile, 1971. See also M. Conceição Tavares, "Auge y Declinación del Proceso de Substitución de Importaciones en Brasil", Boletín Economico de America Latina, 9, I, Mar. 1964.

(4) See C. Furtado, op. cit. p.23 and also E. Bacha, "Os Hitos de Uma Década", 2nd. edit. pp.158-169.

(5) See (3) and also "Relatório da SUMOC", especially 1952 and 1953.

(6) See P. de Abreu Ramos, "Exportações Brasileiras", in "Jornal da Manhã", RJ, Jun.22, 1972, and also I.D.B. research on Latin America exports, report of 1972.

(7) For a detailed analysis on the issue see P. Accioli Borges, "A Agricultura Brasileira nos Anos 40", I.C.B., Universidade do Brasil, RJ, 1960. See also J. Pinheiro Netto, "A Reforma Agrária é Necessária", RJ, 1961. pp.14-23.

(8) See "Relatorio da SUMOC", numbers of 1951 to 1960.

(9) On the issue, see "Relatorio do Banco do Brasil", 1956. On the effects of demand fluctuations in the cycle of agricultural commodities, see J.C. Pinheiro da Silva, "A Crise de 1929 no Brasil", C.E.H., RJ, 1962. See also C. Gunnarsson, "The Gold Coast Cocoa Industry", 1900-1939, Lund, 1978.

(10) See C. Furtado, op. cit., pp.22-24, and M. Conceição Tavares, "Da Substituição de Importações ao Capitalismo Financeiro", RJ, 1972. See also W. Barbosa, "Problemas Metodologicos Para o Estudo da Formação do Mercado Interno no Brasil", SP, 1966.

(11) See E.C.L.A., "Trade Expansion Regional Groupings", vol.2, U.N., 1965. London, pp.98 and 107. See also W. Barbosa, "Historia do Brasil", SP, 1967.

(12) For B.N.D.E. see, "O Banco Nacional de Desenvolvimento Economico", report, RJ, 1954 and also "B.N.D.E.,-Recursos e Aplicações", report to U.N., 1970, RJ. In relation to Eletrobás, see, "Relatório do Departamento de Aguas e Energia Elétrica", 1965; on the financing of national wagons and rails plant (FNV) see report Banco do Brasil, Carteira de Crédito Industrial, Dec. 1952.

(13) See "Politica Economica Externa e Industrialização do Brasil", P.S. Malan and R. Bonelli, among others, RJ, 1976. See also "A Industrialização do Brasil", report of Feira Industrial, RJ, 1962.

- (14) On the referred view see R. de Oliveira Campos, "Problemas de Desenvolvimento da América Latina", speech at International Trade and Production Council, 1970. On the character of the downswing see P.I. Singer, "O Milagre Brasileiro", CEBRAP, SP, 1973.
- (15) On the character of structural changes see L. Jörberg: "Structural Change and Economic growth: Sweden in the 19th Century", in, "Economy and History", vol.VIII, 1965, pp.3-46; L. Jörberg, "Growth and Fluctuations of the Swedish Industry", 1869-1912, Lund, 1961. See also T. Chang, "The International Comparison of Demand for Imports", The Review of Economic Studies, 1945-6, XIII. See also W.W. Rostow, "The Process of Economic Growth", N.Y., 1952., and A. Gerschenkron, "Economic Backwardness in Historical Perspective", N.U.P., 1962.
- (16) On reallocative policies, the use in the period was of current allocative theory, without resource to overall plan elaboration, iterative methods or simulation models. See "A Experiencia do Planejamento no Brasil", several authors, 1972. and H. Hoffmann, "Como Planejar nosso Desenvolvimento?", RJ, 1963. pp.99-111. To a comparative view see. O.E.C.D., "Growth and Economic Policy", Paris, 1964.
- (17) See on the issue reference (2) above and also W. Suzigan, "A Industrialização...", in Pesquisa e Planejamento Economico, 5, nr.2, Dec. 1975. pp.449-451.
- (18) For a detailed analysis of this mechanism see "Relatório da SUMOC", in the period.
- (19) See reference (10) above. To European practices after the Treaty of Rome (1956) see "Relatórios da CACEK", in the late fifties and early sixties.
- (20) An example is B.N.D.E.-E.C.L.A. report, "Análises e Projeções do Desenvolvimento Economico", B.N.D.E., RJ, 1955.
- (21) This point is contested by F.W. Bodré, who argues for a radical change in the policies. "Radiografia de Um Modelo", RJ, 3rd. ed., 1977, pp.84-85.
- (22) Although real terms changes in the interest rates do not generally greatly affect the rate of investment expenditures, the Government administrations in developing countries are sensitive to the issue, as if the interplay should be completely automatic. Low discount rates are supposed to effect on the ceiling of the interest rates and contribute, thus, in the short run, to expand investment expenditures. See in the Brazilian case, P.I. Singer, "O Milagre...", reference see (13).
- (23) See also "Relatório da SUMOC", in the reference period.
- (24) For detailed information on import structure see reports of CACEK, and IBGE statistical yearbooks in the period, "Anuario Estatístico".
- (25) See P.I. Singer, "O Desenvolvimento Economico e a Evolução Urbana", SP, 1968. See M. Alves, "A Crise Economica Atual", SP, 1967.
- (26) See F.W. Bodré, "Radiografia de Um Modelo", RJ, 1977. pp.70-88. See also "Relatório da SUMOC", 1957, RJ, pp.122-124.
- (27) See J. Kubistchek de Oliveira, "A Marcha do Amanhecer", SP, 1962, and also M.V. Mesquita Benevides, "O Governo Kubistchek: Desenvolvimento Economico e Estabilidade Política" RJ, 1976.

5. THE CLOSE OF THE PERIOD OF SUBSTITUTIVE INDUSTRIALIZATION (1956-1964).

"It is now clear that continued reliance on a capital-intensive expansion of the modern sector to solve the urban poverty problem would be a disastrous mistake".

D.C. Rao (1).

5.1. Introduction

While the Administrations which succeeded Vargas intended to produce a minimum of restraint to market mechanisms, the result was less favourable than expected. The unfavourable effects, in fact, were mounting after his deposition. This means that the depressing factors remained and even expanded their effects. They may be resumed as: (a) the gradual reduction in value (to some items even in quantity) of the Brazilian exports; (b) the persistence of the inflationary pressures and even their expansion, as a result of unfavourable foreign trade developments. The persistence of the inflationary pressures was also a product of the structural maladjustments which became aggravated by the more rapid process of growth. This structural phenomenon was characterized by the previously mentioned relationship between the scarcity of exchange resources, periodic trade imbalances and money issue to cover this situation domestically. (see graph 6.1, chap. 6)

As an example of the inflationary pressure, we add the "living costs' evolution" in the Guanabara state (Rio de Janeiro town) in the period 1944--1967, as computed by Fundação Getulio Vargas (FGV):

Year	Index of Total (1953 = 100)	Year (Cont.)	Index (Cont.)
1944	34	1956	182
1945	40	1957	212
1946	46	1958	243
1947	56	1959	338
1948	58	1960	437
1949	61	1961	583
1950	67	1962	884
1951	75	1963	1507
1952	87	1964	2889
1953	100	1965	4787
1954	122	1966	6764
1955	151	1967	8824

Besides this structural situation, the political crises of the middle fifties required considerable amount of public spendings with non-budgeted items, in a similar way to what would later occur in the early sixties. These crises were, in fact, related to business cycles, or economic fluctuations. The additional Public funds' demands were used to cover oscillations of funds in the commercial banks and also other spendings. Thus, improvised operational costs contributed to aggravate problems which were results of deeper causes.

These Government spendings, since they were unexpected, worked to produce the reduced efficiency of the public policies, and this may consequently have influenced the swings in the branches, etc. This unequal influence of the public capacity to operate in the economy shows that the Government suffered from the influence of the same forces it was supposed to counterwork, and the eventual weakening of the growth policies was reflected as a decreasing efficiency.

The Kubistchek Administration assumed functions without emphasizing the above mentioned difficulties, which were thus considered to be a minor threat. The measures which were adopted to promote investment expenditures were associated with the so-called Targets Plan, and became soon implemented. The expansive emphasis was set on infra-structural works and on the construction of a new capital to the country, Brasília.

5.2. The Kubistchek Administration (1956-1960)

In fact the adopted policy by this Administration was a reflection of the conviction it had on the presence of the expansive forces and thus the public purpose was to accelerate the expansion of the branches which were more sensitive to immediate stimuli. In this sense, the tremendously expanded demand for civil construction was conceived as a gigantic operation to displace all the mentioned maladjustments, and carry the expansive forces into a new favourable position. Thus, through the expansion of the civil construction was expected as a kind of "contaminative effect", also on the branches which were in a down-swing. From a historical point of view, this proceeding seems to have been correct, once the expansive forces which had prevailed in the last 20 years were, indeed, in a position to prevail once again and even coming, in this phase, up to their highest impulse.

5.2.1. Kubistchekian Target plan

The Kubistchek Administration, which entered office in Feb., 1956 had also the advantage of finding Instruction 113 in force, which contributed to reduce, in the short run, the costs for capital importing (3).

The new flow of imported capital goods was favourable, especially when we observe that Latin American regional trade was reversing the previous expansive trend. The reserves of foreign currency, were in fact short and entered a more difficult period, while an immediate loss of purchasing power abroad was not occurring due to capital inflows. The exports could not be shifted to increase more in the short run, since a lower responsiveness was apparently resulting in conventional stimulant mechanisms, as bonuses. Once the industrial expansion was continuously demanding more equipment, raw materials and other inputs, the rigid exports would lead into a bottleneck (4).

To face this set of problems, this Administration elaborated a quite simple economic programme. It presented a group of 30 targets to be obtained in 5 years, without circumstantiate the instruments to achieve these goals.

The Government action would thus be concentrated in the effort to ease eventual difficulties in relation to the achievement of the prospected targets. There was a strong reliance on expansive policies of credit and capital methods for imports and the above mentioned Instruction 113 was thus used as intensely as possible to gather resources. The supposition was that the promoted association between domestic and foreign corporations would bring out exchange resources, in order to raise the purchasing power abroad (5). The positive aspect of the Targets plan was the full acceptance of the import substitution mechanisms, while associating in a larger degree, the foreign capital to the industrialization process. In this aspect, the Targets plan was abandoning one of the previous assumptions which oriented the builders of the import-substituting policies, i.e. the domestic production was being designed to a domestic economy, and it was thus a part of some sets of strategic national goals. Conversely, the designers of the Targets plan were more concerned for (a) the insufficient domestic savings, especially in foreign resources and (b) the potential support from abroad so that industrialization could achieve, if the national goals were less visible.

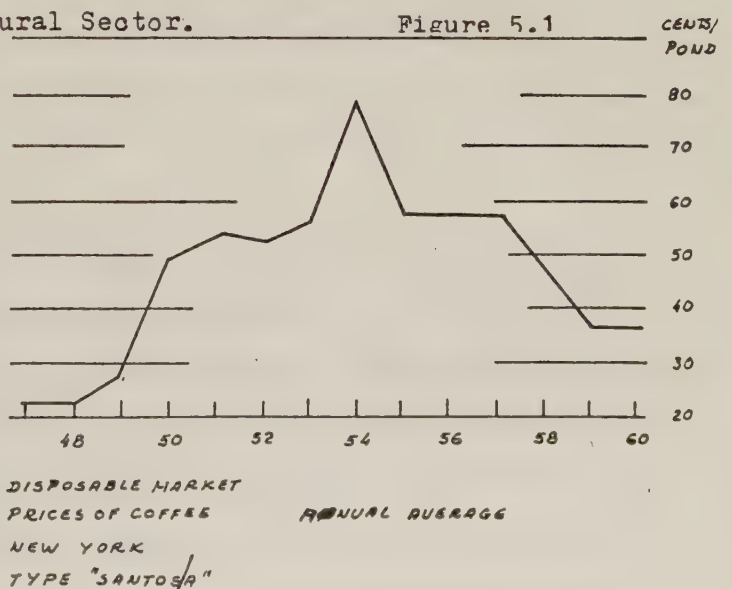
5.2.2. Economic Programmes and Persistent Fluctuations

A) Effects of the Exchange Position.

Brazil as a country is highly dependent on foreign markets to her primary products and suffered much the effects of the trade stagnation of 1958—1962 a phenomenon which was further aggravated by the continuous expansion of imports. The Instruction 113 was designed to cover the reduced import capacity, but it was clear that in the middle run it would also produce pressures to increased capital outflows. As a result of the foreign gains which would be generated in the domestic market, a growing amount of capital would have soon to be expatriated, since the newly associated corporations would have to be paid in exchange values. These coming remittances in the near future would then make the exchange reserves shorter, while the effective persistent cause for the bottleneck in exchange would not be removed by the use of the instruction in reference.

B) Deprimental Forces in the Agricultural Sector.

It can be interpreted that the long run stagnant trend of the agricultural sector found soon the support of another additional negative factor which was the falling export values since 1957. Since the coffee producers had met favourable prices in the forties and especially in the early fifties, the investment in coffee rose again, and the output was growing both domestically and abroad. Thus, the unfavourable developments

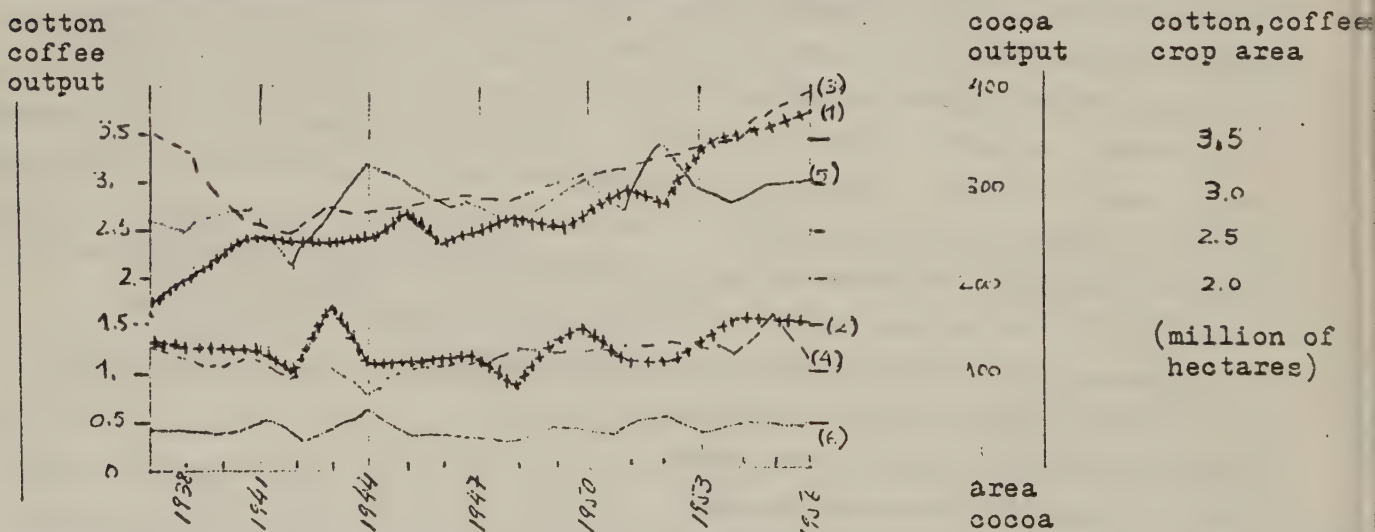


toward the prices of the most dynamic domestic export crop would necessarily extend the depressive effects on other agricultural commodities. This was certainly a factor which reinforced the trend for capital outflows from agriculture, and made industrialization policies more attractive to potential investors.

The agricultural production was not fed by technical innovations, which in fact benefitted more the manufacturing industries. Strong variations in prices and demand, as well as increased competition abroad, were contributing to an inferior performance of the agricultural activities. A reversal effect of this course could only be achieved through massive investment, and of course, this was not possible in the conditions of scarce capital resources which prevailed in the period of import-substituting policies. The export sector, as we know, had lost much of its previous competitiveness in the previous 30 years and it was not able to annul per se the stagnant forces. Indeed, the export list was meager. Coffee, cotton, and cocoa covered during the period roughly some 70 to 80 per cent, or even more, of the value of Brazilian sales abroad, but the country would have a stable trade surplus if other export items would have represented a value equal to half of the value of the three main exports. Thus, a wider range of export items would have to be necessary in order to counterbalance also the wider growing range of the import items. This of course, would have required a broad set of investment policies.

Figure: 5.2

THE RELATIVE STAGNATION OF EXPORT AGRICULTURAL OUTPUT (1938-1956)



- (1) cocoa area of production (thousand hectares)
- (2) cocoa output (thousand tons)
- (3) coffee area of production (million of hectares)
- (4) coffee output (million tons)
- (5) cotton area of production (million hectares)
- (6) cotton output (million tons)

cocoa +++++ (1), (2)
 coffee- - - (3), (4)
 cotton— (5), (6)

The obtaining of these resources in need was not possible within the priorities in use in that period in the country. The conditions for financing agriculture abroad had developed less favourable also.

The international climate was not favourable once the current opinion abroad understood that the support to primary activities was one of an alternative nature when considered the option adopted in the country for industrialization policies. This means that the situation was difficult to the domestic Authorities and the available policy consisted in financing with domestic resources as much as possible of exportable commodities and then place them in foreign trade as allowed by the circumstances (5). Under these premises, it is possible to understand the official policy adopted by this Administration which simply attributed some targets also to exports, and expected the gains of traditional exports plus capital inflows to be large enough to finance the developmental additional effort.

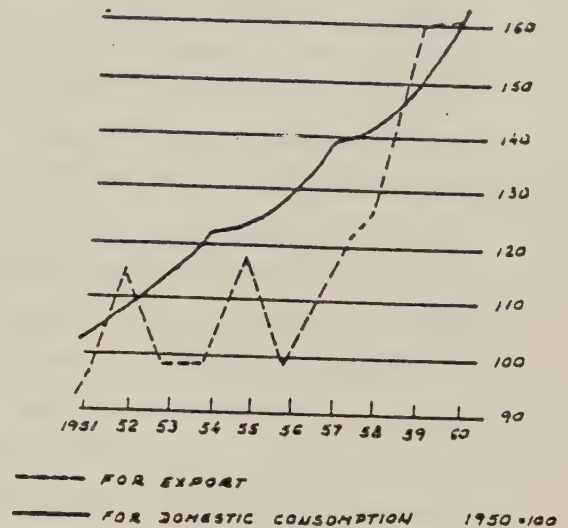
C) SALTE Plan and Targets Plan.

This negative aspect of the Targets plan was similar in nature to the shortcomings of the SALTE Plan. Targets plan coordinated investments of different nature, more in the administrative sense, without a rigorous economic criterion, since the plan followed much of the branches trends. Since the plan intended to accelerate these trends, sometimes it ascribed too short time periods to the conclusion of the goals, and this may be interpreted as a source of diseconomies. As an example, the construction of the new capital of the country, Brasília, would be committed and finished within a period of 5 years. This required a tremendous effort, since the other current economic activities which could be interfered by this new demand were still considered in a position of being fully satisfied. Of course, this effort to finance this preferential demand obliged also the Government to fully use budget deficits. As a result, this contributed to the inflationary pressures. The overall effect on financial balances was a growing indebtedness, domestically and abroad. This indebtedness also stimulated the dependence on capital inflows.

Since the Brazilian Authorities had expected much of capital inflows, this expectation was to some extent contradictory with the cold relationship existing then between the World Bank, BIRD and IMF, on one side, and the Brazilian Government, on the other. It can be interpreted as this Brazilian Administration expected a comprehensive policy from these international regulatory powers based on the fact that the Kubistchek Government was promoting capital liberalization and industrialization. In fact, in this aspect, the Kubistchek Administration was not different from the others in the fifties: since 1953 a considerable liberalization had been produced, with the sole exception of main-

FIGURE 5.3.

AGRICULTURAL OUTPUT INDEX



taining import-substituting devices. And further more , with reference to tariff protection to industrialization it could be said that in this Administration the Public Authorities implemented more protection than any other Government since the World War II. For these reasons, it is difficult to understand why the Government was then expecting some favourable attitudes from the Authorities abroad.

D) Sources of Domestic Financing.

In domestic terms, the sources for financing the new developmental projects were the Banco do Brasil and BNDE (National Bank for economic development). The BNDE bank had begun its operation in order to reduce the overload upon Banco do Brasil. This was performing as a central and commercial bank, and also financial house. The BNDE channelized the foreign resources in aid and borrows, in order to use them as countervalues of its domestic financing operations. At home, its resources were gathered from the "Fundo do Reaparelhamento Economico", and abroad the main sources were the World Bank and Eximbank. Once the capital demand grew rapidly in the period and the purchases abroad were handled many times in the form of suppliers' credit, consequently with higher or floating interest rates, the costs for these operations was growing more than what was desirable to the Brazilian Authorities. Thus, the Brazilian Government was soon in need for a vast operation of refunding its debts in a single re-passing rate, and such an operation of course could only be available through the international support of IMF.

The discussion with IMF revealed the difficulties at that time which met the developing countries in order to finance their expansive projects. IMF suggested that Brazil would adopt measures of clearly depressive character, and the Brazilian Government abandoned the negotiations in fear of such exigencies. In fact, the package proposed by IMF would adjust downward the Brazilian economy, eliminating the aggregate demand supposing to be both excessive and thereby generating bottlenecks. (6)

5.2.3. Monetary Policies

The monetary policy of the Kubistchek Government was thus based on an interplay of growing public indebtedness and the freedom for capital flows. The major purpose with speeding up capital flows was to produce a temporary surplus, through the prevalence of inflows, in order to expand the resources available, domestically, to invest. Money issuing was thus carried out both to cover the exchange flows as to finance public spendings. Resources were also channeled, in a compensatory movement, to expand the consumer capacity of the individuals, under the assumption that this stimulated the final realization of the production, and led to new expansions. Since the rapid expansion of credit speeded up the amount of speculative loans; speculative and consumer credits marched together. Of course the interest rates had raised, but in the inflationary conditions this was not enough to discourage borrowers and speculators. Thus, the Government promoted monetary policies which supplied the general demand in expansion, in the assumption that these policies would gradually eliminate the structural maladjustments.

As an example, we can see the evolution of some important financial parameters, as computed by FGV, in the period 1951—1964:

Table 5.1 Financial Parameters : Nominal Indexes (1953 = 100)
Some Brazilian National Financial Parameters. Period 1951—1964.

Year	Loans Total	Money in Circulation	Check Clearings	Quotation of U.S. \$ (Free)
(1)	(2)	(3)	(4)	(5)
1951	70	78	80	67
1952	82	85	85	76
1953	100	100	100	100
1954	132	122	139	139
1955	156	150	168	165
1956	191	174	232	165
1957	245	204	292	171
1958	318	251	423	293
1959	394	312	592	355
1960	510	406	877	423
1961	725	595	1399	647
1962	1130	871	2519	1164
1963	1781	1344	4935	2000
1964	3107	2648	10245	3419

Source: FGV

The public insistence on the use of inflationary mechanisms produced a shift of resources and consequently carried to growth and income expansion. Of course, this policy has been strongly criticized by late policy-makers. In this criticism, it has been pointed out that this Administration promoted a five-year burst to induce higher rates of growth. According to this, how to cope with inflation was thought to be an exclusive problem of the next-to-come Administration. The expansion of the aggregate demand would have to lead to balance of payment problems, but these problems would be presented later, when another Government team would hold office. (8)

5.2.4. Practical Results

A) Expansion of the Private Sector.

The Kubistchek Government presented a realistic view in relation to the Private Sector. The Administration made permanent efforts to promote the formation of new corporations (an expansion rate of 12 per cent annually) as well as it used prices movements as a guide for reallocations of resources. The assumption behind these decisions was that it was possible to satiate the expanding demand, since the Government sector achieved the cooperation for the potential

Table 5.2.
Evolution of the Secondary Sector (Position in Dec. 31, 1958). 1955 = 100

Percentage (1) Branch	Nominal Expansion (2) No. of Corporations Informing to IBGE	per Branch (3) Total Labour Force	1955 = 100 (4) Workers	(5) Monthly Average of Workers	(6) Total Wages and Salaries	(7) Worker Wages
Total	87	101	99	98	191	188
Manufact.	88	103	101	99	193	190
Non-Metal.	90	96	94	93	169	166
Metallurg.	105	122	118	114	216	206
Equip&Ma.	121	124	119	117	223	211
Electr. Eq.	115	144	139	135	250	244
Transp. Eq.	140	217	207	200	409	386
Wood Proc.	95	95	94	94	159	161
Furniture	100	103	101	101	184	174
Paper & Coa.	104	112	109	107	198	200
Rubber	125	123	128	114	193	188
Skins & Sim.	101	107	111	107	193	200
Chem. & Pharm.	87	105	97	96	209	197
Textiles	92	89	89	89	163	169
Dress. & Sim.	100	99	99	100	172	177
Foodstuffs	57	88	89	89	165	169
Drinks	74	95	92	90	180	179
Tobacco	45	90	87	79	180	182
Printing	104	107	103	104	202	196
Others	112	122	121	121	219	217

Source: Statistical yearbooks, Anuario Estadístico, several numbers, FIBGE.

investments of the Private Sector. The opportunity for this cooperation had occurred in this period, and mutual advantages were available. Thus, the expansive forces were stimulated to a maximum and the price inflation was supposed to be counterworked in the middle run by the expansion in the productive capacity.

When we consider the number of the new corporations which entered the market in this period, and observe the large share of them which subsisted to the following phase of economic development, then we consider realistic the policy the Government chose to promote the Private sector and the assumption it made that it was necessary to induce its expansion. An explanatory reason for this may be found in the fact that the country was now a nation-wide market, and the infrastructural improvements could absorb tremendous resources, especially in the available labour power, which before have not been fully incorporated into the mechanisms of growth. The Public investments for the construction of the new capital, the expansion of the road networks, the construction of gigantic hydro-electrical plants, as well as the expansion of electrical equipment, transportation output and shipbuilding were all strong consumers of labour, even for the less skilled. The penetration of the hinterland, the formation of new enterprises, the expansion of credit, the labour migration, all those facts seem to be inter-related and expressed deep cumulative changes. In fact, the Government was making use of the human and land potentials to produce new farms, new roads, new ventures, and this could be a catalyzing effect in the expansion of the consumer and investor credits, inducements of heavy industries and civil construction, etc. This, overall expansion of the economic forces was made through extensive mechanisms i. e., without introducing more advanced technology but basically through the reproduction of the productive processes already in existence in the country.

B) Expansion of Public Investments and Capitalistic Economy.

As a result, the roundabout methods within the national economy expanded through the country, and the improved supply as well as the added capacity to export were gradually becoming available, especially in the sixties (9).

The optimistic view of the Administration contributed much to feed this result. The Public expenditures can - when viewed from this standpoint - be interpreted as advancements on the increased monetization of the economy. Several local branches which performed in primitive markets were then incorporated into the main flow of the economy, especially in fishery, forestry and cattle-raising.

(Selected Years Expressed as Percentage:) Gross Capital Formation and Taxa-

Year	Total Gross Capital Form.	Investment of Governm.	Direct Taxes	Indirect Taxes	Inv. Priv.
(1)	(2)	(3)	(4)	(5)	(6)
1959/62	16.6	3.9	5.8	13.0	12.7
1962/67	16.2	4.4	6.4	14.3	11.6
1968	16.3	4.2	8.7	17.8	12.6
1969	16.6	5.8	9.8	16.1	10.8

Source: FGV

Table 5.3.

TABLE: 5.3.

BALANCE OF TRADE

1938 - 1969

US\$ 1.000

YEAR	EXPORTS FOB	IMPORTS CIF	BALANCE	YEAR	EXPORTS FOB	IMPORTS CIF	BALANCE
1938	295.558	295.389	+ 169	1954	1.561.836	1.639.539	- 71.703
1939	305.395	261.603	+ 43.792	1955	1.423.246	1.639.539	+ 116.411
1940	263.390	250.728	+ 12.662	1956	1.482.020	1.306.835	+ 248.141
1941	356.798	282.031	+ 74.767	1957	1.391.607	1.233.879	- 97.219
1942	400.831	239.168	+ 161.663	1958	1.242.985	1.488.826	- 109.896
1943	466.519	317.332	+ 149.187	1959	1.281.969	1.352.881	- 92.504
1944	574.532	415.142	+ 159.390	1960	1.268.802	1.374.473	- 193.336
1945	655.428	448.568	+ 206.860	1961	1.402.970	1.462.138	- 57.123
1946	985.380	673.320	+ 312.060	1962	1.214.185	1.460.093	- 260.862
1947	1.152.308	1.216.727	- 64.419	1963	1.406.480	1.475.047	- 80.368
1948	1.180.461	1.120.987	+ 59.474	1964	1.429.790	1.486.848	+ 166.340
1949	1.096.468	1.102.996	- 6.528	1965	1.595.479	1.263.450	+ 499.065
1950	1.335.467	1.085.119	+ 250.348	1966	1.741.442	1.096.423	+ 245.227
1951	1.769.002	1.987.091	- 218.089	1967	1.654.037	1.496.215	- 13.392
1952	1.418.117	1.981.855	- 563.738	1968	1.881.334	1.667.429	- 250.505
1953	1.539.120	1.318.667	+ 220.453	1969	2.268.836	2.131.839	+ 136.997

Sources: Serviço de Estatística Econômica e Financeira - Ministério da Fazenda
 Carteira do Comércio Exterior - Banco do Brasil

The investments for the construction of the new capital, Brasília, has been estimated to 2.5 per cent of GDP in the period, but the expenditures with infra-structure and expansive works were much greater. In fact, the spendings for Brasília constituted in 28 per cent of the gross investment expenditure in the period, including both public and private costs, and this is an impressive figure. Brasília was thus, some 70 per cent of all the public investment in this Government. The relationship between the steel & iron, forestry and civil construction improved much and induced increases of the productive capacity in other branches (10).

Thus, taking into consideration the adopted policy from the point of view of the obtained results, the balance has to be considered quite satisfactory. Politically, it can be said that the individuals were expecting material progress, jobs and these results were visible in every branch of the economy. Most of the goals defined by the Public Authorities were realized, and some even overcome, since the upward cumulative movement came to a maximum. When measuring the net gains of this growth process, the result was found positive. This period is a clear phase where the inflationary financing of growth really succeeded. How can we explain this?

Firstly, since the country has been an importer and not a producer of technology, the cost for borrowing of technology has been, of course, cheaper than the cost for both borrowing and producing technology which would exist in the case if the country has been also a technology producer. This means that periodic accrues in the prices are the common proceeding of manufacturers to pay for added or expected-to-be new technologies. As a result, the profitable increased effect, which is generally related to the initial speeding up of the economic cycles (characterized as well by inflation, in the conditions of the Brazilian market) becomes a constituent part of the continuous process of industrialization.

Secondly, this continuous favourable effect of the inflation is also assisted by the overall financing constituted by public issues, which operate generally as an additional consumer or producer credit in its effects on the market. The Government Authorities issued money in excess to cover the trade imbalances and to pay for public spendings and this constituted a source of demand, since the suppliers can account for it and expect it in reasonable predictable amounts.

Thirdly, the inflation rate - when accelerated - squeezes more wages and inputs than the final products, which constitutes an additional favourable fact to producers. Since the producers combine this effect with a given amount of unused capacity in their plants, the result is a safe margin of profits before an excessive race for inventories.

These current characteristics of the inflationary process in a developing economy were thus combined, in the Kubistchekian period, with massive productive investments and tolerant views of the Public Authorities, in an unprecedented scale.

C) An Economy Based in the Domestic Market.

Another important hypothesis to explain the growth achieved as a result

of the inflationary policies is the supposition that the substitutive industrialization had spread its effects in the entire domestic economy, and thus the adoption of an open inflationary investment profited from broad structural changes and also from the dualistic effects then existing. This is more comprehensive if we remember that the expansion was based on simple principles, i.e. based on existing or easily expanded capacity. As an example, it should be mentioned that for the construction of the new capital over a hundred thousand new workers entered civil construction and this of course implied an additional demand for: food, clothes, footwear, passenger transportation etc., since the absolute majority of these workers were coming from primary activities. This additional demand could in fact be saturated by the existing industries, but if this demand was not created publicly the capacity of these industries would certainly have remained unused. Continuous added demand year after year, so as expanded nominal income through payment of new wages, stimulated both additional investments as other indirect demands. This "Kaleckian" effect of nominal income expansion does not give importance if the real income is increased or not, because when it is redistributed cum-growth its trend is to increase. Metal, cement, iron, steel, furniture, lumber & pinewood, clothes and dresses, foodstuffs, chemicals, transportation etc., every branch could in this position respond through some unused capacity in order to supply other branches' demands or directly to these new above mentioned consumers. Despite the growth effect, these new consumers were originally brought into the market as producers through the inflationary mechanism of income redistribution and money creation (11).

None the less, this movement toward the creation of a nation-wide domestic market was also stimulated by specific developmental activities of the previous Governments. For example, added coal output, added oil production, added KWH-generation were coming each year into the market, and this contributed to ease the costs for new expansions. In relation to KWH-producing, this Government committed two big plants, Furnas and Tres Marias, which became active in the sixties.

D) Growth Disequilibria and Fluctuations.

As we mentioned before, the substitutive industrialization would have to create a bottleneck sooner or later, as a result of structural maladjustments. This bottleneck would have to assume a monetary aspect, as an excess of money was supplied. This would have to reflect the growing imbalances, due to the need for larger imports, and/or overvalued domestic currency, low domestic cost for imported equipment etc. These conditions would also have, at the same time, to be reflecting as pressure for growing exports and/or for an expanded purchasing power abroad. Thus, when looking into this phase of speeding up the rates of growth which characterized (or coincided) with the Kubistchek Administration, it is possible to find several indications of the coming problems, but it is also clear that the set of upward-moving forces was greater than the stagnant elements in operation in the beginnings of the phase. Despite that, the agricultural sector expanded in this period, and the operational linking with new areas in Northeastern Region (Maranhão), North Region (Pará) and Central Region (Goiás) contribute

to opening of new agricultural frontiers, in spite of the backward persevering character of the agricultural production. The domestic incapacity to promote effectively the modernization of the agricultural activities was connected with the nature of the Brazilian process of accumulation and consequently vitiated much the type of produced structural changes.

Structural Changes in Brazil.

Sectoral Shifting in the Domestic Economy, 1939-1970.

(Selected Years) Percentage Position.

Year	Agriculture	Manufacturing	Other	Total
1939	25.8	19.4	54.8	100.0
1950	26.7	23.4	49.9	100.0
1960	22.6	25.4	52.0	100.0
1965	22.3	24.4	53.3	100.0
1970	14.8	28.2	57.0	100.0

Source: FGV (Constant Real Prices)

This incapacity was certainly one of the main sources of the down swing of 1963, a down swing which was aggravated by recessive policies during the crisis of 1963-66. (12)

We also previously mentioned that this Administration was orientated by practical purposes, as can be understood of its label "Fifty years (of progress) in five". This label was not only opportune, but it did represent the tremendous effort to push, maximally, the then occurring expansion. The construction of the new Capital in the central plateau of the country was used as a psychological feature of these expansive policies. During the Kubistchek Government, were added some 19,000 km of new roads to use, a considerable part of them were commenced and finished within his administrative period. The governmental demands for naval construction expanded the merchant fleet to the first position in Latin America, and also increased the demand for steel, iron, wood plates, furnitures, etc. Financing was available to each economic branch, in order to make adequate its response to the rate of growth demanded by the market.

E) Difficult Financing Abroad.

This kind of expansion could not be obtained with basis only in domestic savings, especially with reference to the exchange reserves. Considerable capital inflows were occurring in the period. The main works which demanded the specialties of foreign corporations were negotiable, as we mentioned earlier, generally on a suppliers basis. This can be understood only in face of the financial conditions of the international market at that time, which was different, to financing of projects in Third World countries than it became later. In the fifties, the financial banks were more difficult to gain access to than the equipment suppliers. In fact, the current trade basis was that the banks extended the credit to the equipment supplier and this by-passed its costs, through an additional financial operation, to the demander. The lower interest rates of the banks were avail-

able only through guarantees from some MDC Governments, or against deposits in gold. This climate was thus, inadequate to large investment projects and made the access difficult to external financing. This conspicuous aspect has generally been omitted in the analysis of this period.

It was only in the sixties - under some pressure of the United States Government - that interest rates became more uniform for developmental loans. Until that time, the projects had practically to rely on bilateral agreements among Governments, trade surplus or inflationary financing!

F) Expansion of the Heavy Industries.

Petrobrás, the Brazilian oil company, expanded in the period their oil output by 13 times, while the generation of electric power increased some 60 per cent. Iron and steel items doubled their output. The automotive output expanded 9 times while the number of plants increased from 1 to 9. These expansions stimulated the complementarity within the domestic market.

An interesting point of this period was the extended protection to new corporations and branches. Since the Government fixed the amount of domestic compositions of the products to be gradually achieved by new corporations or branches, this measure gave origin to a protected market which included foreign corporations, since they were operating in the domestic market. The legal protection must be extended as a countereffect of the domestic composition requirements, and a policy originated most of the present oligopolies which successfully operated in the Brazilian economy. (13)

The amount of gross domestic investment, as we pointed out before, grew 3.3 times in this period (1956--1960). Instruction 113, allowed in fact that old-fashioned and also wasted equipment from abroad entered the country as investment, but most of this equipment was still in condition of productive performance, especially in an economy based on labour-intensive methods. The short-run effect of these equipments was also anti-inflationary, since they did not imply immediate movement of monetary resources and were immediately assembled and put into production. This positive effect was also reduced because many industries, especially the new ones, like automobile plants, imported a great deal of equipment and used only a fraction of the existing capacity.

G) Aspects of Reallocative Policies.

The domestic output of capital goods followed the expansive trend of the forties and consequently increased much also in this period. Producers' investments included expenditures in buildings, equipment, vehicles, machinery and other durables. The real investment amount was certainly underestimated due to the current practice in the developing countries of including investment expenditures into the operational costs. A comparative view between the results of the Census of 1960 and the one we previously mentioned of 1950 shows the impressive amount of achieved changes.

In democratic systems, the prominent politicians are always requiring more imaginative solutions from the policy-makers, and this may in part explain why Kubistonek and his staff avoided the proposals of the IMF package to produce

Table 5.4.

TABLE: 5.4.

BRAZILIAN CONSOLIDATED DEBT						
1940 - 1960						
YEAR	CONSOLIDATED DOMESTIC DEBT CR\$ 1,000	FEDERAL FOREIGN DEBT				PAPER FRANCS
		POUNDS £	DOLLARS US\$		GOLD FRANCS	
1940	6,212,178	102,359,337	166,853,145	229,185,500	272,908,462	
1941	5,970,944	101,082,237	158,121,545	229,185,500	272,908,462	
1942	5,290,183	97,614,017	148,677,345	229,185,500	272,908,462	
1943	5,853,473	96,480,497	141,525,645	229,185,500	272,908,462	
1944	6,782,370	83,955,485	125,303,025	229,185,500	272,908,462	
1945	7,895,263	78,372,419	118,380,285	229,185,500	272,908,462	
1946	9,965,459	74,104,045	111,732,845	229,185,500	272,908,462	
1947	10,063,228	72,660,033	106,645,105	229,185,500	272,908,462	
1948	10,416,533	71,266,285	100,167,065	229,185,500	272,908,462	
1949	10,427,595	49,720,425	94,047,965	229,185,500	272,908,462	
1950	10,439,238	28,384,098	88,137,985	25,284,500	37,405,500	
1951	10,446,425	25,428,808	81,955,805	25,284,500	37,405,500	
1952	10,450,213	22,270,900	76,738,045	21,970,500	34,094,750	
1953	10,451,141	18,973,570	64,132,505	20,372,500	32,976,150	
1954	10,451,537	15,738,540	70,566,905	20,372,500	32,976,150	
1955	10,558,245	12,561,890	57,717,345	20,372,500	32,976,150	
1956	10,642,646	9,641,360	51,124,360	20,372,500	32,976,150	
1957	10,736,766	7,700,520	45,085,685	12,459,000	23,319,885	
1958	11,000,051	6,263,620	38,791,845	11,286,000	22,108,175	
1959	12,444,418	4,802,320	32,218,105	11,312,000	22,125,915	
1960	12,568,908	3,137,520	25,531,725	11,220,500	22,017,165	

Source: Contadoria Geral da República - Ministério da Fazenda

a downward business adjustment in Brazil. These proposals were in fact restrictive (14). The re-scheduling of the Brazilian debt (2 billion U.S. dollars) was, thus, a heavy component later in the downswing.

Generally, when a Government adopts a high expenditure policy, its success is measured by the degree of employment in the economy or the multiplier effect. In relation to the employment level, this period presented a high consumption of labour, but the position of the decade comparatively is less impressive due to fluctuations in the previous period. The labour absorption was also of a minor degree, since the equipment in use now was more labour-saving than those in use during the forties. As we know, in developing or growing economies, due to the capital flows, GNP is generally smaller than accounted GDP and this puts some difficulty in the evaluation of the multiplier effect as best: in gross or net terms? The expansion of credit to consumers, of course followed by speculative credit, seems to be easier to measure, since it expands directly the level of nominal disposable income and assures the realization of the demand, while simultaneously expanding the real income in this last aspect. The expansion of the level of disposable income produces immediate effects on the income levels of other individuals, through cumulative buy-and-sell mechanisms. Thus, these expenditures became reflected finally as decreases of inventories and carried also to additional investments and expenditures.

The degree and amount of these income changes are then reflected in the financial components of the market and carry with them indications to the economic forces to proceed with new readjustments. These adjustments in need, when correctly interpreted, became new favourable policies adopted by public and private policy-makers. Decreases of inventories means new orders, and a considerable part of "new orders", in developing economies, means the same as "imports". Such demand for new imports - when the economy is faced with decreasing values of exports - will stimulate further imbalances in trade and exchange, with need for additional capital inflows. In this sense, inflation, branches' disproportions, and foreign debt became recurrent mechanisms (15).

One of the interesting features of the Targets plan was that it was introduced without a previous consultancy, in detailed terms, of the Government with the private sector. Notwithstanding this aspect, the plan corresponded to the basic potentials of the economy, and thus revealed to be a positive instrument in the process of growth. As a matter of fact, the Brazilian policy-makers had, at the birth of the Targets plan, an extensive experience of promoting the economic action of the State. The approach was simple, and has today been submitted to an intense criticism. It was characterized by the acceptance of some macro-economic rules, and the desired effects were generally projected in broad terms. Then, the specific project was ordered to be followed in detail by the managers, who kept in close contact with the organisms in condition to provide support to eventual changes. The fact that present analysts sometimes consider those proceedings as poorly does not deny that they were adequate to the conditions in the fifties, and were not different in the nature of assumptions assumed in other

parts of the world.(16)

The current tools for obtaining reallocations were changes in the mechanism of relative prices, price controls, subsidies, bonuses and additional expenditures. The effectivity of such mechanisms was of course limited by the structural devices of the economy, since the policy-makers were intervening in the market and did not effectively promote a system of central planning.

The Kubistchek Government was also able to avoid confrontation with military groups and other conservative pools. The Government did make an effort to develop a managerial fashion and granted a certain sympathy for this from the Private Sector.

The inflationary financing of growth in this period has been pointed out as the cause for future monetary confusion and the inflationary gallop. This can only in part be considered as true. The fact was characteristic by a decreased domestic value of the cruzeiro, but also a considerable productive capacity was created, a capacity which was in use during the subsequent decade. Thus, a part of the difficulties must be attributed to following Administrations, which presented more repetitive policies, faulty of imagination and also adequacy. In this sense, we must also recognize that the inflationary financing was not invented by Kubistchek Administration, but simply used by it.

5.2.5. An Interpretation

Since this Government emphasized rapid growth, the expansion of credit should have to be furthermore promoted. Generally too much creation of credit is related to inflationary pressures. In this sense, the mentioned credit creation was combined with some insufficient supplies, contributing thus to other inflationary effects. This means that the rising prices made the cost for borrows in the short run cheaper to producers, since the future prices would be large enough to absorb any additional costs. Speculative gains were thus associated with consumers' credit expansion and were especially made in sectors with strong demand, scarcities etc. In order to reduce the inflationary effects on food prices to consumers the Government implemented some control through the organ to control of prices to consumers (COFAP). Of course, the Government expanded credit with the purpose to ease operational and investment expenditures, and thus avoid upward pressure in the interest rates. However, this was an additional element of inflation, since in the subsequent years also unfavourable developments affected the domestic position of the foreign trade.

A) Inflation and Disequilibrium.

The problem of controlling an amount of the above-mentioned inflation would obviously require measures the Kubistchek Administration was not in ability to promote. The Government outlays were expanding, the available quantity of goods and services in the market was also in expansion, and the Public Authorities were activating any mechanism in the economy to feed these expansive forces. Competitive export subsidies, while expanded, could not be more successful when the Latin American region and the primary commodities in general were in a

difficult position. Thus, this Administration was not in ability to produce other than paliative measures to postpone the bottlenecks and this was aggravated by a more rapid character of the growth which this Government implemented.

What were the main problems this developmental process was presenting? Why was this Government not able to solve them? As we know, the "take-off" period was in the thirties, and resulted in the collapse of the primary export activities. This process of growth then took the form of an import-substitutive industrialization, a phenomenon which was perfected under the World War II. Thus, the long-run expansion of the manufacturing industries was based on traditional production, and intensive labour use. The domestic market gradually improved the production of clothes, textiles, foodstuffs, footwear etc., in the expansion of the thirties and the forties. Then, through the formation of a heavy industrial sector, with new plants in branches as iron and steel, chemicals, electric-generating power etc., as well as new infrastructural facilities, the industry grew enough in a scale to begin the substitution of capital goods and durables. This fact was being possible also due to the fact that the market was relatively small, and this rapid expansion aggravated the normal different rythms which currently appear during manufacturing growth.

B) The Problem of Structural Maladjustments.

As a result of the overall change, the proportions among the sectors of the economy were thus changing and the structural maladjustments became characteristical ones. These disequilibria were, among other aspects, characterized by: (a) changes in relative demand, with decreased relative prices of agricultural products; (b) expansion of demand for service industries' output; (c) increased demand for durables; (d) increased demand for capital.

Thus, it is possible to say that a "problem of proportions" was growingly existing at that point in the economy, while some measures would be required in order to allow the pace to be continuous and get more balanced growth. Let us detail the mentioned aspects: (a) changes in relative demand. - While a considerable amount of differentiations had spontaneously developed into the factors' use in the market, we know, as previously mentioned, that several changes were induced by Government action, and thus were not simply produced by the gradual overcome of the agricultural sector by a modern industry. The Government, - under the conditions of import-substitution - was financing shifts from rural to urban consumers, and in this way eliminating losses of low productive domestic agriculture with cheaper imports of agricultural commodities. This cost was payed with change gains of the more capitalized and advantageous exportable primary products, but in fact the mechanism was near its complete exhaustion. Thus the domestic agriculture was not expanding its output to produce a surplus of overall domestic-demanded commodities, but the effect of a surplus was created by the domestic low-priced imports.

(b) demand for services' industry output. - the increasingly sophisticated urbanization or the urban market was requiring an amount of expansion of services' industry output greater than it had been expanding up to the period of Kubistchek

In the early stages of substitutive industrialization, it was possible to adapt the existent capacity liberated by the stagnant behaviour or decline of the primary activities. Yet, in this period with the formation of a nation wide market, new massive investments were required to adjust the supply to demand.

(c) demand for durables. - Lower urban cost or urban market developments expanded the consumers' demand, with particular emphasis at that period on household equipment. This strong demand required that the domestic branches expanded also their productive capacity. Thus, an additional amount of capital goods were demanded as imports, competing for the available exchange in disposition to other important potential imports.

(d) increased demand for capital. - Since the industries and services were expanding, a great number of ventures was being introduced each year in the market, thus, requiring both credit to suppliers and consumers, equipment etc. The Public Authorities were continuously making an effort to ease financing, and resources abroad were made available especially to support new branches and public works.

There were two possible ways to adjust this excess demand or unproportions among the sectors. The first possible way would be to find an "equilibrium point downward", i.e., to establish a policy which would curtail credit, reduce some output, squeeze demands, etc. This would be more or less the characterization of "inflation of costs", and it would certainly lead to a depression. This was considered to be necessary both by (1) the domestic adversaries of the industrialization and (b) the IMF proposals presented in 1958-59 (17). The other possible way would be to find an equilibrium point upward, i.e. while the intention was to counterwork the "structural maladjustments" through inflationary mechanisms, the Public Authorities would wait for a more favourable juncture, with favourable developments in foreign trade, in order to reduce investments, inflation rates, etc.

As we know, the Kubistchek Administration followed the upward "adjustment point", and abusively used Public expenditures with imbalanced budgets, credit facilities etc., in an amount which was possibly excessive to avoid additional problems in the future. The Kubistchek period became known as a period where corporations appeared as "mushrooms".

Industrial Enterprises in Kubistchekian Years:

Year	Number
1956	72,114
1957	75,937
1958	80,664
1959	88,935
1960	92,378

Source: Departamentos Estaduais de Estatística e Conselho Nacional de Estatística, Secretaria Geral, 1961.

While there was excess in money issue, it must be said that most of the corporations which were then created showed an aggressive market orientation, despite the

initial reliance on Public resources.

From a historical perspective, the Government Authorities in this period followed less obvious policies among the policy-mixes, potentially allowed by the character of import-substitutive industrialization. Since monetary remedies would demand considerable time and fiscal complement in order to produce adequate effects, despite these reasons excluded the risk for a recession, the Government Authorities found it preferable to ease the controls on credit, and to stimulate the internalization of foreign capital as well as to promote an overall expansion.

C) Overall Growth and Easy Money Policy.

A question would arise, why the Government was not selective in the credit mechanism, in order to moderate the inflation rate. The point seems to be that the Public Authorities were not confident with a possible strong decrease of the inflation rate during unfavourable foreign trade developments. But these Authorities were more confident in the "market forces", since the domestic market was supported by an overall set of public expansive projects.

Indeed, the rate of economic growth was sustained during all this period, and after Kubistchek it reached possibly the peak for all the recent Brazilian experience (1961). The accelerations of investments, public consumption, etc. certainly also expressed some erroneous emphasis, mainly because, at a certain point of the situation, any previous allocative reference was abandoned and persisted then as the dominant effort simply by the pressure to achieve the target. On the other hand, some particular reasons have explanatory values to explain why the Government choose the supposed "upward equilibrium point". Firstly, this Government was the result of the forces which promoted growth policies in the antecedent past. While to some extent, the Government was compromising with forces which were adverse to industrialization policies, it was basically in a constrained position to follow import-substitutive measures and, consequently, to be orientated toward the expansive possibilities in the economy.

Secondly, the interpretation of the policy-makers who influenced in the Kubistchek Administration was clearly in favour of measures able to increase the efficiency through expansion. As an example, the inflationary pressure of the agricultural low productivities would be counteracted by the effects of land occupation and use, which the construction of Brasília and its transportation network would positively bring with them. In fact, this supposition was correct, since the new areas opened to agricultural commercialization in Goiás and Mato Grosso, as well as Pará, would gradually reflect as a favourable force in the economy. But this effect would first be fully available some 10 to 15 years later. The basic assumption of hidden potential efficiencies in the economies was thus a kind of optimistic view, much in agreement with the growth theories of the 1950s, in a formulation by which a number of partial solutions were soon to be implemented and give way to other favourable solutions etc. According to this spirit, when some solutions became inadequate or old-fashioned, the policy-makers would find other ones equally efficient and suitable.

Thirdly, there was no practical available reason able to convince the Government Authorities that the policies they were implementing toward achieving an "upward point of equilibrium" could be less favourable to reduce "structural maladjustments". In fact, the by then recent historical experience seemed to indicate less favourable effects when liberalization policies were driven without expansive domestic policies. In this sense, the Government Authorities could appreciate the mix they implemented based on capital liberalization and expansive domestic policies as the most favourable combination at hand (18).

Ultimately an increase in capital inflows was expected, related to the expansion of industrial capital goods and such resources would have mitigated the balance-of-payments problem.

Thus, it seems reasonable that the optimistic point of view of the Government, which made an option towards expansion, while the changes in foreign trade were visibly deteriorating the country's purchasing power abroad. Of course, the visible trade account would have to vary according to the phase of the business cycle. The Public Authorities certainly supposed that an expansive policy would contribute to more aggressive trade performance abroad, while in fact the extension of international changes would have to impact on domestic economy and also required domestic adaptations. Paradoxically both favourable and unfavourable developments in current account of the balance of payments would be reflected as an expansion of money supply. If considerable surpluses could be created by "invisible" movements, this would reflect as domestic issues to cover the homely counterpart of these flows. If negative performance would occur (through eventual increased freight cost, or remittances abroad or payments of services, etc) then the result would also be the need for money issue due to exchange readjustments. This trend would thus be supported by the Public expenditures, Treasury payments etc.

5.3. Quadros Government (1961)

5.3.1. The Political Situation

Despite the strong electoral support which made Quadros President, he was conducted to resignation by a coup d'état. The visible causes have generally been identified in the literature with his moves to establish trade and diplomatic relations with socialist countries, so as his open dialogue with Cuban leaders (19). After a short period at the verge of civil war, the Vice-President Coulart hold office being later ousted by a military movement.

During the short period (7 months) of Quadros Administration, a set of new policies was intended to be implemented, with adoption of financial reforms to face the growing economic imbalance.

5.3.2. Economic Policies

Quadros had also a clear opinion on economic matters, and his main purpose was to stimulate the market mechanisms through a complete price reallocation. The first purpose was to reduce the inflation rate, by means of a reduced Public

spending and also reduced subsidies to imported goods. The Government opted by a strong business adjustment, since the continued years of industrialization by the Public Authorities made difficult to reduce credit without enforcement. Through Instruction 204, several protective measures were eliminated in trade and credit was curtailed both to producer and consumer. The impact of such measures was resisted by private corporations, since these corporations also found support at congressional level. SUMOC's 204 Instruction traded exports and imports at free market rates, phenomenon which was especially negative to coffee, as to import-substitutive policies. The cost exchange mechanism - a preferential treatment which some imports received - was eliminated and the Consumer Price Index (IPC) speeded up. The higher prices in retail consumption were followed by rising costs, since other sectors were also compelled to adjust their prices(20)

The purpose of the Public Authorities was to eliminate the distortions of the price mechanism and this has been interpreted as an attempt to collapse the import-substituting system. This opinion is clearly excessive. The domestic industries were in fact being required - through this public policy - to be more productive. But it is true that the adoption of this effort toward a realistic prices policy was an admission of the bottleneck faced by the import substitutive industrialization. Obviously the first consequence of the adjustment policy was an acceleration of the inflation rate, with strong reduction in the resources in the hands of the individuals. The Government was expecting that this "warming up" of the consumer expenditures would soon calm down and the aggregated demand would be reduced. But as a result of the Government's overthrowing, this policy was abandoned and the monetary policy became out of control, due to successive political crises. It is clear that in this period the inflation also was temporarily out of control. As a practical result of the policy then applied, it is difficult to establish the effects, since the adjustment attempt was changed by overall credit, money issues, non-ordinary Public spendings etc. The fact is that corporations resisted the enforced policy and after the Government was ousted businessmen produced a race to the banks, receiving the demanded resources for operational and investment expenditures. Ironically, this was a top year of the 1957--1962 expansion (aprox. 12 per cent growth of GDP).

5.4. Goulart Government (1961-1964)

In economic terms, the Quadros Administration has been explained as a period where the bottleneck was existing but the businessmen were not informed. (21) Since they were not informed, these businessmen acted all the time with expansive policies and postponed cautiousness to coming years. This sarcastic note has an element of truth: managers were not understanding the Public efforts to change policies and when they understood they became certainly more restrictive than the Government expected. Labour unions played an important role in the opinion, a movement which impeded the military of assuming power after Quadros deposition, and when Goulart came as President the bargaining power of the labour unions was considered as being stronger.

5.4.1. The Political Circumstance.

There seems to be little doubt that "the structural maladjustments" made the political struggle more critical about the option for the adequate mix which would allow to overcome the problems. Government, employers and workers could not find a common point which corresponded both to equilibrium and the maintenance of tolerable shares for the factors. Thus, the trend was to the political struggle become reflected as institutional instability in the early sixties. The attempt of the military to seize power and the consequent adoption of Parliamentarism worsened the picture. It reinforced the situation of the crisis, simply by the fact that this political system was adopted only to avoid that Vice-President Goulart should exert Presidential power when assuming as President. As a result of these facts, the decisional centres of the Nation became divided. Some complications arose, and had economic effects, when the Federal Government, generally the ruling power in the country, was divided in two Authorities.

Thus, it may be stated that the political difficulties in this period contributed to a less favourable approach of the economical problems, certainly due to the fact that the Government was missing a unified interpretation of the problems. It was difficult for the Administration, the continuance of a policy of substitutive industrialization when high officials within the Government were opposed to it. This opposition assumed sometimes a form of permanent counterwork of industrialization measures, and even open critical views. The Government tolerance to this opposition at high level has been explained in terms of Goulart mentality. He seemed to be tolerant to oppositors, due to his large previous contact with labour unions movement.

Another simultaneous phenomenon was the development of forces abroad which were hostile to the process of domestic industrialization in its substitutive nature. These forces promoted pressures to achieve a full liberalization of the Brazilian policies of industrialization. In order to produce a full satisfaction to the adverse elements abroad of the import-substitutive industrialization, the Brazilian political forces which promoted this type of development had to be driven out of scene.

5.4.2. Economic Policies

The Instruction 204, had brought into force the issue of importation bills. These bills were issued by Banco do Brasil, and the aim was to curb purchases abroad. The funds were channeled to the monetary Authorities and the bills were redeemable at a 4 to 6 months term. This was supposed to be complemented by the prospected effects of Instruction 215, designed for financing exports of capital goods and durables. This Instruction is generally considered as a tool for implementing trade with the socialist countries, including China.

effort which incorporated the chances produced by the process of industrialization. It attempted to foment the exports of manufactured goods to socialist countries, particularly China. A broader range of trader partners was conceived by Quadros as an important condition to feed foreign trade expansion and economic growth. The move of Quadros' policy-makers in order to eliminate the domestic low-priced foodstuffs was followed by adjusted prices also in the goods and services produced by the Public sector. As a consequence, when the tight money policy of Quadros was abandoned, a complete new round of prices readjustments was onset. During the Parliamentary period (1961-1963) the Government was in position to only made a minor effort to change economic policies. Thus, a reduced effort was orientated to control prices. Despite the Presidential power formerly was reduced, we understand that the successive Cabinets were considered short-lived when established, due to the permanent political crisis. In this condition, the different Ministers of Finance were in a difficult position to promote a defined monetary package. Swings are current phenomena in all economies. The policy-makers must be aware of the changing conditions in order to reduce the negative effects of the fluctuations and in this way contribute to postpone or, if possible, even brake depressive circumstances. The elaboration of adequate restrictive and/or inductive package of measures to foster upward cumulative movements will also require flexibility. It is necessary to follow the movement of the supposed warning main indicators of the juncture, as import licenses, employment indexes, wholesale prices, export letters of received credit, demand for lending etc. Recessive forces seldom manifest two-fold in the same way i.e., it is necessary to adapt the policies in a continuous flow in order to achieve a good result.

A) Fluctuations and Monetary Policies.

Monetary policy is not only an adequate weapon for inducing forced savings, income shifts and growth but is also useful in its anti-depressive character. This power becomes particularly strong when monetary policy is combined with fiscal remedies. Generally two major restrictions can be found when adjusting an economy: (a) the real character of the cumulative movement - up or downward - must be understood; (b) the circumstances must, politically, make the prescribed policies possible. Changes require tentative adjustments and false signals can be mistaken for correct signals. Manipulations of credit and exchange rates affect disposable income and can produce undesirable effects (22). Thus, an obvious condition necessary to implement changes in monetary and fiscal policies is a given stability of the Authorities or of the views desired to produce the changes.

B) Furtado's Three Year Plan.

Despite the Government produced a three-year-plan with a clear proposal of tight money policy, this plan was not implemented due to political rejection.

tion of labour unions or some corporations to additional squeezes. Since until this period, the labour unions had been supporting the economic policies of the Government, with the reduction of this support the subsequent phase was one of political confusion. The real wages had been in fall after 1958 and in this period the labour unions attempt to react against it, in the space achieved by the division of the political forces in power. Thus, a competition race was established between wages and prices. The nominal variations in the wage rates did not avoid that the real wages decreased through all this period. While the factors share had thus not been considerably modified, the reduced gains to the corporate sector which were connected with the inflations provoked also criticism in the leading manufacturing circles. The previous scheme of inflationary financing, which was an expression of the mechanism of resources transference in advantage to the urban activities had come into a bottleneck. During this difficult position, the forces which had been supporting industrialization policies were not in a condition to bargain a common point of equilibrium.

C) Montevideo Agreement for Free Trade.

During this Government were produced the first measures to set the LAFTA agreement into functioning. The Montevideo Trade Agreement of 1960 gave origin to the Latin American Free Trade Association (LAFTA or ALALC). This included, at that time, Argentina, Brazil, Chile, Mexico, Paraguay and Uruguay. Hopes were then for a rapid development of an integrated market. While this vision was rudely shattered by the facts, LAFTA has represented a permanent effort to coordinate the Latin American trade (23).

During the Goulart period the Public Authorities perfected the credit to purchase of durables, which contributed to the rapid market expansion of the automobile branch. The money issued, while excessive, was in part balanced by a reduced velocity of its use, the phenomenon occurred in 1962 and aggravated in 1963, with consequently large rates of deposits increase. This could be a favourable condition if the Government was not undergoing a worsened position in the balance of payments, paying even debts abroad with gold from the national reserve. This policy was also a source of irritation abroad, since it revealed that the Government was preferring to erode gold reserves than accept certain amount of additional liberalization. Despite the effort of the Public Authorities to put the exchange and financial markets under control, the performance of these sectors was less favourable in 1962 and 1963.

Therefore the impact of both, (a) the political-administrative changes and (b) the reduced economic performance contributed to the squeeze of the investments and also of the import capacity. In order to save exchange resources, the Government promoted the expansion of domestic-produced capital goods, especially through restrictions to the importation of these goods. An exception was kept in the case where a specific import was financed from abroad (Instruction 242)

Through Instructions 249 and 250, special exchange quotas were made available in order to stimulate exports of manufactured goods. In 1963 the balance of payments of Brazil showed a negative position exceeding 300 hundred million of U.S. dollars. At the close of the year in reference, the Government started negotiations with authorities abroad in order to produce a scheme to redeem Brazilian foreign debts. These negotiations were still beginning when the legal Government was overthrown in April, 1, 1964. Thus, a close association between the continued worsening of the Brazilian foreign trade and the political crisis developed as the basis for the elimination of the democratic régime.

5.4.3. An Interpretation.

While the basis of Government economic policies were of an import substitution nature in the mixes before 1964, this assertion did not imply the absence of contradictions. As an example, the period Quadros-Goulart comprehended in fact different approaches to the economic situation. These differences played an important role, especially when in reference to growth policies (1961--1964). During Quadros period, emphasis was set on stabilizing mechanisms, with elimination of low-priced imports in the domestic market, an inflationary adjustment of demand, pressures, etc. This policy would gradually evolve into a business squeeze, with credit curtailments and higher costs for capital etc.

The coming Administration, while formally supporting the industrialization drive, was not able to present a persistent policy, a fact which certainly contributed to price instability, additional inflation etc. A formal interpretation of the above mentioned situations is generally stated as: (1) that the import-substitutive industrialization had come into a bottleneck; (2) that this bottleneck could not be solved by import-substitutive type of mixes. While the first assumption seems to be correct, it is not clear that the indication of the second supposition interprets correctly the situation. The fact that a coup d'état displaced pro-industrialization forces does not prove the industrialization could not be driven at the same basis in use until then. For a proper interpretation of the case, we must consider other components:

(a) the changes in the foreign trade position; (b) the excessive and imbalanced investments produced in the phase of more rapid growth (1957--1961), when compared with the resources available; (c) the continued excess of Public expenditures. Let us detail the above-mentioned points:

(a) the foreign trade position. - It was in fact an extraneous circumstance that the expansion of 1957-1961 coincided with unfavourable trade developments to Brazil abroad. The more current circumstance was previously the coincidence between the domestic and foreign cycles movement. The reason for this contradictory behaviour is possibly related to the facts: (1) the strong domestic-based drive of industrialization; (2) excessive investment in coffee in the early fifties. The (1) domestic-based drive of industrialization certainly promoted some differen-

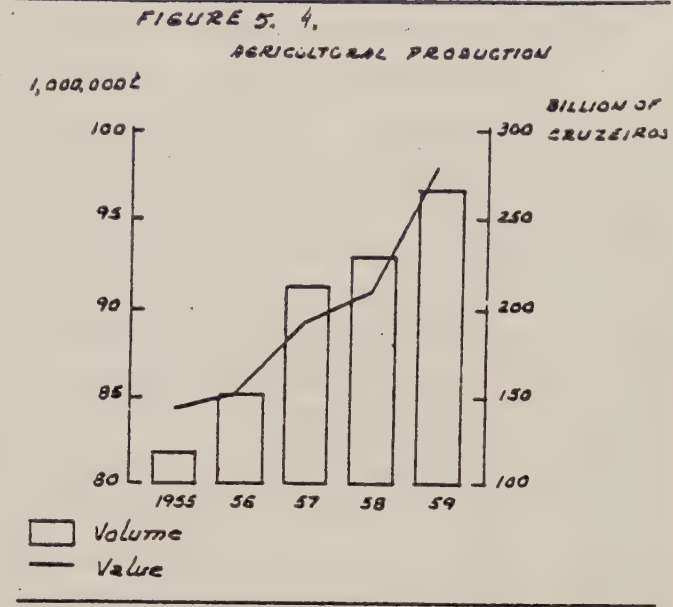
in relative demand decreases the weight of the agricultural sector, reducing thus the common pace of domestic and international swings. Despite this, domestic economy was strongly dependent on imports and trade gains, and the demand in changes abroad would have thus indirectly to be reflected in the domestic resources available to the industrialization drive.

The Public Authorities during the fifties seem to have underestimated the mutual character of these cyclical forces. The problem was not important, except for when the size of the domestic market had grown enough to constitute a slow moving machine. This picture became somewhat more complicated if we include component (2).

The more liberal coffee policies, adopted in the middle fifties, as a result of the favourable prices developments in the forties and under the period of the Korean War, contributed to controlled coffee production. This was certainly a reflection of the inadequate Public aims toward primary activities. The excess output repercutated in 1959—1962, during falling prices abroad and unfavourable foreign trade and balance of payments developments. Provided the condition that other export items were also less favoured than coffee in the period, the result was disastrous. Thus, this situation extended the negative effects of foreign trade conditions, and acted as an additional recessive and inflationary force in the period (1959—1962). This was roughly the situation when the Brazilian foreign trade improved enough to produce a stabilizing effect, in the period 1964—1966. Thus, there is little run to suppose that the inflation rate would follow uncontrolled also in the middle sixties, and also to sustain the point of view that depressive policies were necessary to the recovery of profits margin and export capacity. It is more suggestive the fact that Brazil remained strongly dependent on international market developments, and the domestic policies were consequentl also depending on general changes abroad. If the foregoing sound meaningful, more balanced policies could have been adopted in the period 1964—1966, if the democratic forces would have survived that crisis.

As a developing economy Brazil was (and still is) largely sensitive to her foreign trade position, and the improvement in this trade- while small- act to reduce pressures in the balance of payments, strongly reduce the gold outflow and performing as a stabilizing factor.

(b) The excessive and imbalanced investments. - The massive investments of the decade, and especially of Kubistchek Administration, this being a product of money creation, promoted the expansion of the economy and also income shiftings.



This may be roughly considered a source of political instability in the coming years. To a surprising extent, investments by money creation resulted in productive expansion and, consequently, jobs, output and growth. Simultaneously, a large amount of the investment was in excess, due to the lack of adequate planning. This may be characterized by the fact that the Government supplied resources to different branches, but these resources, when in the market were generally attracted by the most expanding activities and corporations, feeding thus the structural maladjustments. A significant reason for this was the excess investment, which resulted from an extremely short period of maturation of the main projects and also from the limited capacity to import goods and services.

(c) The excess of Public expenditures. - Since it is possible to characterize a situation of excess investment during Kubistchek Administration, as expressed by money issues and growing Public indebtedness, while this Administration oriented Public expenditures basically to produce financing, then an aggravation of excess Public expenditures occurred afterwards. Indeed, in the period 1961--1963 as caused by demands of the industrial crises, considerable amounts of money were issued to cover trade imbalances, capital outflows and individuals' races to bank deposits. These circumstances acted as a reason for reduced economic efficiency. Thus, money issue and Public spendings, while growing due to the inflationary pressure, were less visibly related to productive investments.

The fact that reduced efficiency can be ascribed to Public expenditures in the last period under analysis does not imply a deterioration of this instrument of economic intervention of the State. As well as other components of substitutive-industrialization policy the Public expenditures could be reactivated in productive terms under the condition of improvement of the Brazilian foreign trade, or business adjustment. In both cases, the character of the Public expenditures as a reallocative component in the market could be maintained, since it depended more on the optics adopted to the policy-mix than of a possible exhaustion of the mechanism. Thus, the overall mixes comprised as of import-substitutive type, can be detached in their component parts and the resulting elements can then be re-ordered as another tool for the same purpose.

In fact, with the change of régime, the import-substitution policies were abandoned, and consequently, the previous mechanisms were no longer in use because the functions they were supposed to perform were not in interest of the new ruling forces. When considering the Public expenditures, they were no longer fully used in their reallocative character in the post-1964 mixes as they have been used before, in the period of import-substitutive industrialization.

REFERENCES.

- (1) See D.C. Rao-"Urban Target Groups", p.139 in "Redistribution with Growth", Joint Study of World Bank and I.D.S. at the University of Sussex, O.U.P., 2nd. print., 1975.
- (2) Vargas himself had doubts of the efficient character of the liberalization policies in use in his speech to the Nation of Jan.31, 1954.

- (3) For an appreciation of Instruction 113, see Isaac Cherman, "A Instrução 113 da Sumoc", Rio de Janeiro (RJ), 1958. See also M. Alves, "Economia e Revolução", RJ, 1958. and also P. Dias, "A Revolução Burguesa", Porto Alegre (PA), 1961.
- (4) For an analysis of 1961-63 squeezes, see Paul I. Singer, "O Milagre Brasileiro" SP, 1973, CEBRAP and also "Ciclos de Conjuntura em Economias Subdesenvolvidas", 1965, RCB, Nr. 2 pp.93-112; see also Maria da Conceição Tavares, "Da Substituição de Importações ao Capitalismo Financeiro", RJ, 1972.
- (5) The evolution of the purchasing power abroad can be seen in table 6.6 columns (2) and (4). and also for a different period and computed differently in Helio S. Schlitter, "Comércio Exterior do Brasil e Desenvolvimento Economico", in "Revista Brasileira de Ciencias Sociais", Belo Horizonte, II-1, 1962, pp.107-174; see also "Indices de Preços no Comércio Exterior do Brasil", in "Revista Brasileira de Economia", RJ, ano 6, Nr. 2, 1952, pp.71-103. For another analysis of the Brazilian foreign trade in the period see several numbers of "Relatorio da SUMOC"; For un ulterior period see the analysis if C. Von Doellinger, H.B. de Castro Faria and L. Caserta Cavalcanti, "A Política Brasileira do Comércio Exterior e Seus Efeitos", 1967-1973, Relatório de Pesquisa 22, RJ, IPEA-INPES, 1974.
- (6) A critique has been raised on inadequate market promotion abroad on Brazilian tradables. See "Relatorio do Banco do Brasil", RJ, 1964.
- (7) For an analysis of IMF discussion with Brazilian Authorities in the period see J. Kubistchek de Oliveira, "A Marcha do Amanhecer", SP, 1962. See also Angus Maddison, "Economic Progress and Policy in Developing Countries", 1968, London. Maddison, a world-known expert on development policies, is critical to IMF views on the discussion with Brazil at that point.
- (8) This criticism on Kubistchek policy was done by President Quadros on Feb. 6, 1961. See also: Aurelius Morgner, "Implicações Sociais e Economicas da Atual Inflação no Brasil", in "Sociologia", vol. XXI, Nr. 2, 1959, pp.125-133.
- (9) See on this aspect above mentioned reference (1) and also M. Alves, "A Crise Economica Atual", SP, 1967. See also C. Prado Jr., "A Revolução Brasileira", SP, 1966
- (10) This point can be verified by comparing Government and statistical Yearbooks' information. Ignacio Rangel produced on the aspect several papers.
- (11) This question has also been detailed by I. Rangel. See also O. Batista Filho, H. Ferreira Lima, Martins Rodrigues & others, "Capitulos da Historia da Industria Brasileira", SP, 1959. See also J. Barbosa, "A Industrialização Recente", SP, 1962. pp.12-18.
- (12) See reference (9) and (4). See also Delfim Netto, A. Pastore, E. Pereira de Carvalho and others, "Alguns Aspectos da Inflação Brasileira", SP, Estudos ANPES, Nr.1, 1965; See also R. Mauro Marini, "Dialectica do Capitalismo", SP, 1965.
- (13) All the data are from Government sources, as Ministries, or F.G.V. or F.I.B.G.E. , as we mentioned before. The protection of the domestic enfant industry by law was a common fact before the sixties, but the novelty of Kubistchek Admini-

- stration was certainly the inclusion of all "domestic" industries of a branch desired to protect, being their national or foreign.
- (14) An extensive criticism of IMF proposals is available in Roland Corbisier, "Capital Estrangeiro", and "Operação Pan Americana", ISEB, RJ, 1959.
- (15) This point was analysed in several different periods. See, as an example, A. Delfim Netto, "Alguns Problemas de Planejamento Para o Desenvolvimento", SP, FCEPA-USP, 1962. See also Yale Brozen, "Causes and Consequences of Inflation in Brazil" SP, ESP, mimeo, 1954. For a structuralist approach see Furtado, C., "Dialectica do Desenvolvimento", RJ, 1964 and "Subdesenvolvimento e Estado Democrático" Recife, CDP, 1962; and "Perspectivas da Economia Brasileira", RJ, ISEB, 1958. See also S. Magalhães, "Desenvolvimento Industrial", 1958, RJ; and Loeb, G. F., "Industrialization and Balanced Growth: with Special to Brazil", Holland, 1957. See also Oliver Onody, "A Inflação Brasileira, 1820-1958", RJ, 1960.
- (16) Criticism has been raised on the high aggregate character of the models which have been labelled as "Harrod-Domar type" of models. Notwithstanding, these type of models were then of general acceptance.
- (17) These forces against industrialization which were still strong in this period in Brazil. Its basic assumption was that imported goods were cheaper. These forces have socially been identified as landowners and "pure" exporters. See Nelson W. Sodré, "História da Burguesia Brasileira", RJ, 1964, and "Formação Histórica do Brasil", RJ, 1961. See also Florestan Fernandes, "Capitalismo Dependente e Classes Sociais na America Latina", RJ, 1973, and Eugenio Gudín "Inflação" RJ, 1959. See also Alberto P. Guimarães, "Inflação e Monopolio Estatal no Brasil" ECB, RJ, 1963.
- (18) See Roland Corbisier, "Desajustes Estruturais", ISEB, 1960, mimeo; See also C. Furtado, "A Pré-Revolução Brasileira", 1961, RJ. See also Inácio Rangel, "A Inflação Brasileira", RJ, 1963.
- (19) See on the issue Mario Vitor, "Cinco Anos Que Abalaram O Brasil", RJ, 1965; Moniz Bandeira, "O 24 de Agosto de Janio Quadros", RJ, 1961; Gileno de Carli, "J.Q., Brasília e a Grande Crise", RJ, 1961; see also Ivo C. Piccoli, "As Presenças na Renúncia de Janio", SP, 1961.
- (20) For IPC evolution see "Conjuntura Economica", F.G.V., Feb., 1962.
- (21) The expression was firstly used by Mario Alves, in a conference to students, in late 1961.
- (22) See on the issue: Arthur M. Okun, "Potential GNP: Its Measurement and Significance", 1962, also printed as "Cowles Foundation Paper", Yale, 1963, Nr. 190; See also Arthur F. Burns, "Economic Research and The Keynesian Thinking of Our Times", pp.14-18. See also Paul Douglas, "Controlling Depressions", W.W. Norton & Co., N.Y., 1935, pp.73-79.
- (23) See on LAFTA developments the papers of the Permanent Executive Committee, PEC, which gives the history of LAFTA meetings and main problems.
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6. BALANCE OF THE PERIOD 1947-1964.

6.1. Introduction

The process of industrialization in Brazil in the period 1951-1964 produced an array of structural changes. The manufacturing industries, especially the heavy branches, expanded at higher rates than in the preceding decades. When measuring by 1949 real prices, GDP grew at a rate of 6.0 per cent yearly in the period, despite the oscillations in agricultural products. The high rate of investment in Brazil during this period (1951-1964) is remarkable in view also of the overall expanding demand in the economy, since heavy and light industries run parallel in demanding relatively scarce resources as skilled manpower, capital and technology from abroad. A considerable part of this investment was of public origin or induced by Public expenditures and the resources were produced through the mechanism of money issuing combined with an expanded purchasing power of the country abroad.

Indicator of Structural Changes. Real Product Index by Sectors. 1965 = 100.0			
Designation	1947	1957	1967
Agriculture	43.3	67.1	102.3
Manufact. Sect.	26.0	58.6	115.0
Commerce	41.2	69.3	112.4
Transp. & Commun.	25.4	58.7	114.9
Services	34.6	67.5	111.9
Total Product	34.0	64.3	110.0

Source: I.B.E., F.G.V.

6.2. Public Budget and Growth

During the years of this period (1951-1964), the Brazilian economy attained, thus, a remarkably high growth, although accompanied by recurrent business fluctuations. These fluctuations were caused both by domestic and foreign situations, as the prices were changing abroad for exportable primary commodities and structural maladjustments at home.

The main factors for the high economic growth attained in the period were: (1) favourable coffee prices in the 1940s and until 1953; (2) the active policy of investment in manufacturing industries and infrastructural facilities; (3) the relative abundance of labour; (4) the relatively high ratio of savings, since including the component of Public investment and related mechanisms of compulsory savings; (5) the equilibrated or balanced remuneration of the factors, especially in the period until 1958, despite the inflation rate. In order to assure an average rate of investment in the period exceeding 15 per cent per year of the GDP, the Government made large use of inflationary financing and underbalanced budgets, especially after 1956. Thus, it is possible to consider the Public budget in the period as a component of governmental growth policies.

The scale of Government financing of the various countries in the world increased much in the fifties and in the early sixties. This trend was also visible in Brazil. The role and function of the State in Brazil changed considerably during the fifties, since the Brazilian Government developed a Public sector of corporations, which were not only in pioneer functions in their respective branches, as in the case of electrical-generating plants, or road construction, steel & iron output, investment bank, etc. Governmental financing included both the use of budgeted programmes and special accounts, investment bank, portfolios, etc. Most federal, state and local Government expenditures were generally produced under the form of general and ordinary accounts, used for payment of basic consumed services such as the Police and the Defense, current Public expenditures and also investment expenditures. Notwithstanding the inclusion of investment expenditures in the Public budget, a growing set of special accounts and in particular institutions of the Treasury were created in order to expand the level of domestic investment. While the rate of taxburden to domestic income was not high when compared to other countries in the period, an increase should be accountable for the use made of inflationary financing, especially after 1954, to cover Public deficits and expansionary credit. Since public disbursements to individuals were low in the period, as well as welfare programmes' costs in general, the level of taxburden may in fact be interpreted as high, compared to the level of domestic disposable income. Thus, as being characteristic of a country with a low level of income, the structure of the Public receipts was inadequate as a source of funds and relied mostly on indirect taxes.

6.2.1. Public Indebtedness

Two main aspects seems to be related to the growing State indebtedness, when approached from the point of view of fiscal and financial aspects: (a) the occurred changes in the structure of savings and investments, created through the process of industrialization; (b) the weak structure of the Public receipts. Let us detail the issue, somewhat: (a) the changes in the structure of savings and investments (gradually from rural mechanism to urban) were the result of structural changes related to industrialization. Excise and sales taxes grew in importance while import taxes decreased correspondingly to some extension. The role of primary activities in savings mechanisms had been decreasing during the past 40 years, and the resulting structure attributed to a growing performance of the State mechanisms of savings as inducers of investment. (b) The weak structure of the State receipts is understandable from the table 6.1. Our first observation when consulting this table is that indirect taxes occupied in the period the average position of 59.5 per cent (see the 3 years period), which reveals the characteristic performance of a low-income type of economy. In this case, the real receipts from indirect taxes, if we exclude the inflation rate, tends to be a slowly decreasing percentage of GDP. This comes into contradiction with the growing State expenditures to sustain growth policies.

As a result, Government Authorities must rely both on money issues

and/or borrowing abroad. Nonetheless, we know that a considerable part of the Government expenditures were not to produce a flow of immediate direct receipts to the Government, with the exception of the State-owned corporations. As we see, the current proceedings to gather resources to finance the Public accounts were not especially in favour to raise funds. Then, less conventional access to resources should have to be made available, as for instance money issues, sustained budget imbalances, etc.

Table 6.1.
Federal Revenue (1954-1956) (Crs 1,000,000)

Specification	1954		1955		1956	
	Value	% on total	Value	% on total	Value	% on total
Income Tax	15,340	41.4	19,259	39.9	24,514	40.2
Excise & Sales Tax	14,528	39.3	17,429	36.0	22,988	37.7
Stamp Tax	4,840	13.1	6,445	13.3	8,187	13.4
Import Taxes	2,281	6.2	2,249	4.6	1,979	3.3
Taxes on Funds transferred abroad	..	..	1,684	3.5	1,601	2.6
Electric Power Tax	..	..	843	1.7	1,065	1.7
Other Taxes	8	0	459	1.0	695	1.1
Total	37,011	100.0	48,368	100.0	61,034	100.0

/../ missing

Source: Banco do Brasil

The incomes were low in the country, even those coming from the holding of properties. This was an expression of the low level of economic development, despite the vast changes in process during several decades. Since the real personal income was relatively low, and the demand for consumption was rising, the individual was not tolerant to any additional raise in taxes, especially the direct taxes. Because of the fact that the poor had to pay the bigger slice, the Government limits to raise taxes were visible. If the personal income of potential savers is as low as when it strongly depends on the volume of "avoidable taxes", then the Government has to intervene practically in the savings structure and by adequate mechanism create some kind of forced savings. Thus, when the Government spent more than it received, it was "dissaving". This State-produced dissaving, was in fact forcing savings somewhere in the economy, through alteration of prices in the market. A permanent mechanism of dissavings of the Government Authorities must have been indicating a structural trend in the economy towards a low level of savings. Under normal conditions, the payments of income taxes lead to further investments and consumption, and thus to some extent, a new small portion of income will be added to disposable income in the economy. If the propensity to consume grows more rapidly than the increases in income, somebody in the

economy must "dissave" in order to restore the balance. The same type of observation is also valid in the case of excess investment in an economy. When dissaving, the Government must - in theoretical terms - borrow from the society or abroad an amount in proportion to the excess consumption or the excess investment. In a situation with increases in imports and fluctuations in export gains, the Government dissavings demand capital inflows, and consequently contribute to deteriorations in the balance of payments.

In fact, a deterioration of the Brazilian balance of payments was observable especially in the period after 1957, a deterioration which was accompanying an increase of the capital transactions in the capital account. This was a normal trend, since the country had now entered a more complex stage of industrialization, and this demanded more merchandises and services abroad.

While the capital liberalization improved, the coincidental fall in the prices of Brazilian exportable commodities contributed to reduce the domestic effort to expand the purchasing power abroad. The decreasing expansion of the Brazilian purchasing power abroad was submitted, especially after 1956, to strong pressures due to the Kubistchekian option for an acceleration of the growth rates. Once the rates of the expansion of the economy were high, then a growing larger amount of invested resources would require a large maturation period, reducing the liquidity of the economy. By all these reasons, the Brazilian economy entered a position where it was necessary to pay more in services of capital than the purchased capital effected in accrued value to the economy, conducted the foreign accounts into a bottleneck. Then it is possible to say that at a given point of the evolution of the capital accounts, the capital outflows prevailed in a sustained manner upon the inflows, and this revealed a crisis of the domestic economy in its capacity to pay its debts abroad.

Thus, it must be recognized that the bad position acquired in the balance of payments, which became expressed as a rising foreign debt, is not a particular creation of the State policies, but it corresponded in this period to a stage of the economic development, and the effects of the association between the foreign trades unfavourable movements and more rapid growth of the domestic economy. The growing foreign debt corresponded also to a growing domestic one, both publicly and private. The developments of the public debts were produced at an overall State level i.e., Federal, State and municipal levels. This is therefore a reflection of an inadequate structure of the tax system, in this stage reached by the process of public investment. The Federal Revenues in table 6.1. can be compared with the Federal Expenditures in table 6.2., as an example at the Federal level of the General Account.

In the same period, the Government expenditures (at Federal level; Federal Government) were as follows:

Table 6.2.
Federal Expenditure (1954-1956)
(Cr\$ 1,000,000)

Specification	1954		1955		1956	
	Value	% on total	Value	% on total	Value	% on total
National Security Departments						
Air	3,303	7	4,515	7	5,697	5
War	5,846	12	8,300	13	13,711	13
Navy	3,885	8	5,028	8	6,566	6
Total	13,034	27	17,843	28	25,974	24
Economic Departments						
Agriculture	2,356	5	3,159	5	3,263	3
Labor, Industry and Commerce	1,199	2	1,492	2	2,224	2
Transportation and Public Works	10,525	21	14,092	22	13,838	13
Total	14,080	28	18,743	29	19,325	18
Social and Cultural Departm.						
Education	3,057	6	3,600	6	4,080	4
Health	2,237	5	2,603	4	2,976	3
Total	5,294	11	6,203	10	7,056	7
Administrative Departments						
President's Office, Legislative, Judiciary and other Federal Bodies	4,185	8	3,025	5	7,233	7
Others						
Treasury	10,210	21	14,369	23	43,846	41
Interior and Foreign Affairs	2,447	5	3,104	5	3,594	3
Total	12,657	26	17,473	28	47,440	44
GRAND TOTAL	49,250	100	63,287	100	107,028	100

Source: Banco do Brasil

When examining Government expenditures, we can observe, as an example, that in 1954 the item "Transportation and Public Works" constituted 28.4 per cent of the gathered receipts. In these circumstances, as we know that eventual trade imbalances were generating money issues, these issues were simultaneously ordered also to finance current Public expenditures. Thus, it is understandable that the

control of the interest rate was of a minor significance, once the supply of money was independent of changes in the discount rates. The Government Authorities were stimulating market expansion through a sustained public demand, either in the expansion of infrastructural works, or in the expansion of heavy industry and industrial services. This means that the inflationary effects of foreign trade imbalances were used to finance growth, and thus engendered increases of the level of the disposable income in the country, as well as demands for imports and additional exchange resources.

The Government, especially after 1955, was aware of the low capacity of the current domestic savings to feed additional investment expenditures. A considerable amount of the domestic savings was being consumed in the expansion of the real estate market. Due to the unfavourable developments of the Brazilian foreign trade, the increased demand for exchange resources could be satiated only by a strong adoption of investment from abroad.

The Government Authorities were both directly and indirectly subsidizing the urban consumptions. These consumptions comprised industrial inputs and also the current personal consumption. The mechanism was produced by artificial prices of imported commodities and goods. Through manipulations in the exchange system, the Public Authorities could produce final domestic average prices lower than indicated by the price of the domestic factors or of domestic similar inputs. When renouncing to impose the taxes or taxes upon the final price of price-lowered imported commodities or goods, the domestic Authorities were in fact producing a kind of indirect subsidy. When paying directly a part of the final cost to producer or importer, the Government Authorities were using a direct subsidy mechanism. Direct or indirect subsidies were reflected as: firstly, Public expenditure; and secondly, as non-gathered receipt. Both of these, were reducing the amount of public resources available to other purposes and in fact they altered the domestic cost of the reallocation among the sectors (agricultural and industrial). Thus, in the Government expenditures we found spendings made in order to finance domestic consumption, especially on imported food items; and, in advantage of agriculture, some agricultural inputs. When the Government eventually was adopting a line of action to reduce these imports or their financing, this became reflected in rising agricultural domestic prices, consequently, as a deterioration of the basic consumption of the low-income urban population.

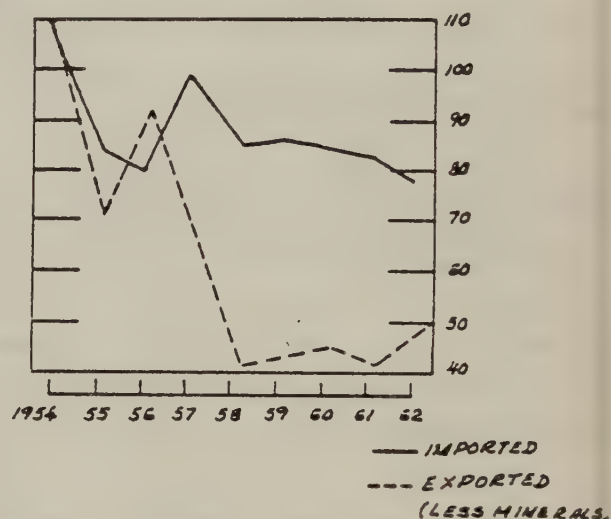
The inflation rate contributed a great deal to a permanent shortage of funds of the Public Authorities, since the changes in prices could not be previous

BRAZILIAN FOREIGN TRADE.

FIGURE 6.1

AVERAGE TON PRICE IN DOLLARS (US)

1953=100



ly ascribed during budget elaboration as an inflationary expectation. The Government constrained itself to a budget with reduced margins to the potential inflations, and this fact produced after a short period the shortage of funds and the resource of borrowing to the Public Authorities. As we know, this borrowing did generally also assume an inflationary aspect, through money issues, aside the supply in the market of Government securities and other papers.

The available long run solution for the Government Authorities would have to be the reduction of the imports or the expansion of exports. Since the upward moves on the export side tended to be, under inflationary conditions, accompanied by aggressive import expansions, the most adequate move should be available if the option could be done by reducing imports. Paradoxically, this solution was less possible during a more rapid process of growth. Given the fact that it was difficult to reduce the imports, an available optional solution should be the raise in capital inflows through capital liberalization, a policy which was adopted as early as 1955.

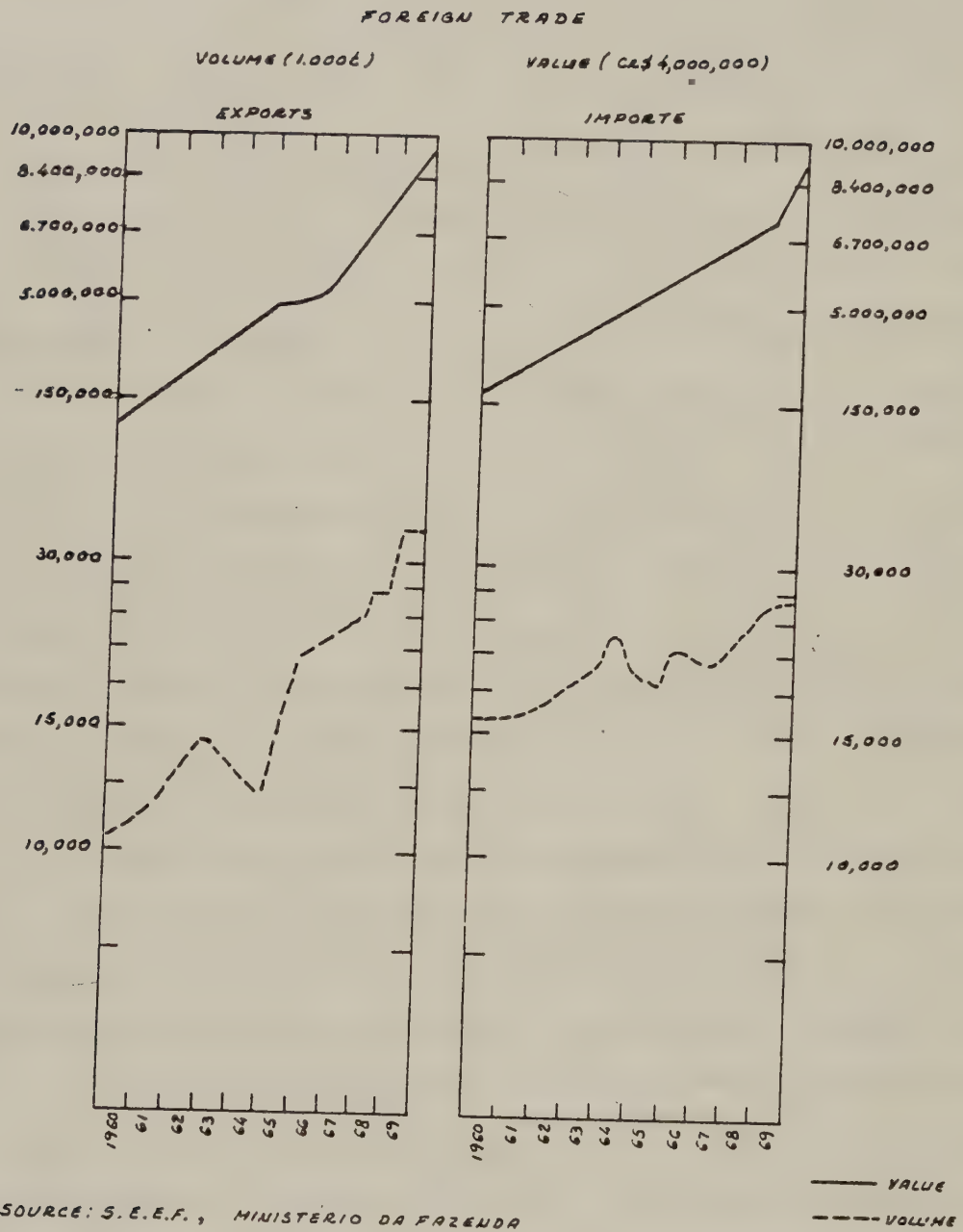
Indeed, it would be difficult to Government Authorities having a policy able to reduce imports without reducing the growth rates. If the Government controlled the money supply, under conditions of credit expansion as required by growth, the Public investments and expenditures should have to be reduced, as well as Public payments to past services. This would both feed recession and expand the velocity of the means of payment, including additional increase in the inflation rate. In these circumstances, the growing Public debt would be followed by excessive money supply, but also of a reduced rate of expansion or even negative rates. This seems to be the reason for which the Government Authorities, in the second half of the period, seemed to be indifferent to the expansion of the monetary supply, thus adopting policies of fully imbalanced Public accounts.

As we mentioned before, the Government in this last period was using inflationary financing of Public expenditures and credit. This policy developed the practice of expanding the money supply continuously. This direct reliance on inflationary methods has been interpreted by some authors as the expression of the end of import-substitution possibilities in the economy in that period. Other authors have conversely argued that import-substitutive industrialization was not exhausted when abandoned, and thus the change of policies corresponded to a change of interests and of ruling groups (1). Whichever the interpretation, the inflationary financing of economic growth began before the swing of the early sixties, and certainly was caused by the different upward trends in the domestic economy and downward move in the Brazilian foreign trade. Thus, the acceleration of the import-substitutive character of this surge, as well as the more rapid rate of the surge itself, are in close connection with the reduced gains of exports, and show the high degree of import-substitutability the Brazilian economy have reached up to this period.

6.2.2. An Interpretation

In the early sixties, different Administrations attempted to introduce

FIGURE 6.2



changes into the set of available traditional policies of substitutive industrialization, without considerable success. While Quadros' economic policies certainly induced a higher mobility of the factors in 1961, the short-term of implementation of these policies can not attribute to a major effect even in the coming years. Some conditions seem to have been characteristic of the import-substitution mechanism: (1) an overvalued cruzeiro (high exchange value of the cruzeiro). When, historically, the international demand for Brazilian commodities was greatly reduced (in this case, mainly in the period 1929-36) and thus the domestic economy was compelled to survive on its own forces, the overvalued cruzeiro performed then a "natural solution" as trade barrier of an "unfeasible" trade. Foreign trade had to be reduced to some priorities and a high value attributed to the domestic currency, transferred to domestic products all the price advantages imported from abroad. Thus, the relative prices were manipulated to make cheaper the domestic "succedaneous" goods (ersatz to imports). As an example, see table 6.3. where a hypothetical good 'A' has its price determined through the decreasing composition of imports. These imports were characterized by cheaper original price. Thus, as observed in the case of the hypothetical good 'A' in table 6.3., the gains of the similar domestic industry in relative price has a cycle. This cycle is determined by the depreciation cost of product 'A' and this fact contributes firstly with growing and thereafter with decreasing gains to the domestic industry-produced "ersatz" good. Of course, what is relevant is not an isolated effect of a hypothetical good 'A' as pointed out here, but the miscellaneous of imports to domestic similar output, as determined by the domestic interplay of needs and available exchange resources. (2) both preferential exchange and credit mechanism in support of industrialization. During a situation in which monopoly or quasi-monopoly of foreign exchange is attributed to one or few agents in the market, preferential allocation of exchange resources is in a position to be done, even if a free market is allowed to function.

The first advantage of foreign trade is, obviously, "trade". Foreign products and skills can be consumed at home at cheaper prices than of that which otherwise have been spent to produce some similar in the domestic market. The second advantage of foreign trade is the fact that it induces to changes through the division of labour and, consequently, at higher stages of accumulation, to industrialization. Of course, considerable trade gains per se do not guarantee sustained industrialization. If the changed condition of foreign trade is associated with industrialization policies at home, then the result may be a phase of import-substitution, more or less extended in its components. In this case, a transference of gains in relative prices may be effected as indicated in table 6.3.

The other side of exchange preferential treatment is availability of domestic credit. The efficiency of both mechanisms is increased by periodic devaluations, which do not eliminate completely the overvalued position of the domestic currency. These devaluations are necessary in order to cut the decreasing efficiency of domestic gains of relative prices ((see column (6) in table 6.3.)). Thus, according to Brazilian experience, import substitution is more efficient

Table 6.3.
Mechanism of Relative Prices Gains to Substitutive
Industries. - Good 'A'.

(1)	(2)	(3)	(4)	(5)	(6)
Year	Import Price Index.	Domestic Price Index.	Foreign Percentage of Domestic Market.	Final Domestic Price Composition.	Domestic Industry Gains of Relative Prices. (3) - (5)
0	100	100	50	100	0
1	108	112	45	110.2	1.8
2	115	119	42	117.3	1.7
3	122	131	37	127.7	3.3
4	128	140	28	136.6	3.4
5	134	157	23	151.7	5.3
6	141	163	20	158.6	4.4
7	148	172	18	167.7	4.3

Source: Hypothetical data.

when also a substitution of domestic inefficient output is encouraged, as made by Vargas (1953), and Quadros (1961). Paradoxically, these devaluations may re-adjust factors and market prices and thus implement effective preferential mechanisms in exchange, since devaluation policies are not used in excess. Under this assumption, an excessive domestic protective effect will not be developed. In a period of about 16 years, the cruzeiro, in terms of exchange value, was devaluated some 10 times. This was produced mainly to keep exports in balance with imports and create conditions at home to raise the efficiency and gains. With this view in mind, several Administrations intended to use different stimuli to take a more active part in the stream of international trade, through an extended participation in the horizontal division of labour.

While the reduction of trade barriers at home were adequate and gradual, the course followed by capital liberalization was in excess, since the policy-makers relied on a continuously growing capital inflow to cover expansion of imports and exports deteriorations. A practical effect was the growing State indebtedness, at home and abroad, and a gradual loss of control over capital movements and inflation rate.

(3) A strong State-oriented reallocative policy: among sectors and subsectors, branches. - In the Brazilian case, a concern for growing self-sufficiency was associated with import-substitution policies. Thus, a more rapid expansion of domestic manufacturing industries was promoted by import-substitution mechanisms in an overall direction. This implied a set of policies not only in reference to

reallocation among sectors but also in relation to branches. Manufacturing industries were preferred to agricultural industries; productive consumption was preferred to final consumption; and substitutive output to traditional output. These broad reallocation among sectors and subsectors was done in order to maximize present output and, thus, the existence of Government-controlled operative corporations was important to override counterworking forces. As we see, reallocative policies were decisive to expand the domestic market.

(4) A relatively constant remuneration of the economic factors. - While labour was abundant in overall substitutive type of economic growth, and capital was scarce, basic policies were followed to maintain the real level of wages in the long run. These policies were possible to implement since the import-substitution depended on two favourable aspects: (a) overall expansion of manufacturing and services industries; (b) an expansion of the domestic market. Once the labour market was developed in this way, then the domestic industries were entering a position in the fifties of increased borrowed technology to improve their efficiency, a phenomenon which contributed both to expand the domestic market and rise domestic competitiveness abroad in the face of liberalization.

(5) Reliance on traditional exports. - In order to achieve a maximal effect of the exchange mechanism, substitutive industrialization policies were orientated to supply a minor resource in exchange to expansion of exports. Thus, while avoiding to promote exports, a maximization of the existing "comparative advantages" was in fact implemented through the reliance on the gains of traditional exports. The reduced exchange cost for exports which allowed substitutive industrialization to obtain a maximal effect of mechanisms as is pointed out in table 6.3.

As it is possible to conclude, the above mentioned items (3), (4) and (5) were of decisive importance to relatively demanded shifts and consequently a rapid formation of domestic capital and domestic market. Simultaneously, the above mentioned conditions (1) to (5) of import-substitution industrialization would be difficult to fulfill without the occurrence of hypotheses (a) to (d) previously noticed at section 1.1.D.

(a) The State should be the main agent in the market.

(b) The State should promote industrialization with the gains in exchange values of the foreign trade.

(c) The agricultural sector should be used as a primitive market.

(d) The State should manipulate the changes in relative prices in favour of industrialization.

Given the above mentioned conditions of import-substitution, we can explain the process of growth of the Brazilian economy in the period 1951--1964 in terms of hypotheses (a) to (d), as related in the paragraph before. Under hypotheses (a), (b) and (d), it seems reasonable to accept the growing State debt as part of the efforts to drive industrialization and promote overall economic development.

It is important to have in mind that the policy of imbalance in Public expenditures and budget deficit, while existing in this period, has been used for a long historical period until this phase. But in the last phase of the period

in reference (1951-1964), a phase which began in 1957, the Government Authorities apparently lost control over the development of the debt, including the foreign debt. Up to 1956, the foreign public debt in particular was in a position of a decreasing amount, and could be appreciated as fully under control of the Brazilian Authorities. This observation can be made in table 6.4., which allow us to understand the mentioned decreasing Government indebtedness abroad, in a 3-year period. This trend was reversed after 1957. In the table we see a decreasing movement of the debt, which expressed the public views orientated to financial equilibrium in foreign currency. This policy in fact was accumulating resources to the more rapid expansion of 1957-1962.

As an effect of the debt highly developed in the period of the surge, the expansive policies should have to be changed for more cautious measures, including counter-cyclical measures, as those intended by Quadros and later by the 3-year plan of Furtado. If these policies should have been fully adopted, the Public expenditures would have to be the first item to adapt to "tight" money. Thus, the adoption of adequate counter-cyclical mixes could have extended the possibility of additional import-substitution industrialization, while the radical change of policies occurred in the coup d'état of 1964 bringing with it the adoption of export expansion type of mixes.

Table 6.4.
Foreign Consolidated State Debt - Brazil. Year-End Balance.
(in thousand units)

Specification	Currency	1954	1955	1956
Federation	U.S. \$	15,739	12,562	9,641
	U.S. \$	64,132	57,717	51,124
	Francs (paper)	32,976	32,976	32,976
	Francs (gold)	20,373	20,373	20,373
States	U.S. \$	13,342	12,149	11,337
	U.S. \$	39,348	35,654	31,989
	Francs (paper)	67,576	67,576	67,576
	Guilders	6,037	3,740	3,740
Municipalities	U.S. \$	2,389	2,348	2,275
	U.S. \$	6,262	5,623	4,990
	Francs (paper)	4,294	4,294	4,294
Totals	U.S. \$	31,740	27,059	23,254
	U.S. \$	109,742	98,994	88,103
	Francs (paper)	104,846	104,846	104,846
	Francs (gold)	20,373	20,373	20,373
	Guilders	6,037	3,740	3,740

Source: Banco do Brasil

6.3. The Achievements of Industrialization

A balance of the positive results of industrialization in the period 1951--1964 corresponds also to a balance of the main effects of the period 1933--1950, since the previous efforts of industrialization were maximized under the period of the fifties and early sixties.

6.3.1. Unfavourable Foreign Trade?

Brazil, differently from other developing countries, has gathered much resources from foreign trade due to her perennial cash crop position. Especially coffee, cocoa and cotton have continuously carried exchange gains to the country, in good or bad years. In consideration to the period 1947--1964, the Brazilian purchasing power abroad grew ca. 13 per cent in constant 1949 U.S. dollars, but this expansion was not sufficient to cover the expanding prices of the imports and the new demands at home. While using the foreign trade as the "engine of growth", the Brazilian Authorities were requiring too much of it, especially in comparison to the investments made in trade.

When measuring the terms of trade by the relation between export- import Laspeyres indexes, the position of the purchasing power increased much in the period, but this can be discussed due to the fact of the Laspeyres indexes trend to strong correlation with the real index value of the dollar. The resulting position of the import capacity does not change substantially with both methods, a phenomenon which seems to point out a strong influence on the domestic purchasing power abroad of the capital movements.

From a historical perspective, the development of the terms of trade in the fifties, can be considered as less favourable than those of the forties. This because of the trade in the forties, while squeezed by the conditions of World War II, developed favourably to Brazil in terms of accumulating reserves in exchange and inducing additional import-substitution mechanisms. In the late forties, these restrained conditions of the war period disappeared, and the demand from abroad for Brazilian commodities increased, despite fluctuations, expanding the exports and the import capacity. Conversely, in the fifties the developments followed the expansive trends of the late forties in the early fifties period, but then the favourable position deteriorated in the trade crisis of 1958--1962, exactly at the point where the Brazilian economy was entering a major surge. Thus, this unfavourable development in the middle and late fifties (also the early sixties) can be considered a major problem.

A question would arise if this less favourable trade developments in the fifties can be considered as the source of the subsequent business squeeze of the sixties. Our point of view is that it was 'a' source of the ulterior problems, while not 'the' source. A considerable part of the problem may be explained in terms of the domestic policies, and in the more rapid growth-oriented policies which the Government Authorities choosed in the late fifties. It is clear that the effort to postpone restrictive measures combined with an acceleration of the expansion operated an additional effect in the structural maladjustments, a phenomenon which

was perceived and characterized still while occurring by several analysts.

Indeed, the domestic capacity of payments abroad in the period until 1964 was quite stable. (See table 6.6., column (4)). This resulted from a growing capital inflow, which was in close association, of course, with additional participation of foreign capital in the process of industrialization. The increased or stable total domestic capacity of payments abroad had to be a condition per se for the more rapid growth implemented in the period.

Table 6.5.
Brazilian Purchasing Power of the Exports.

In 1949 Constant U.S. Million of Dollars.				
(1) Years	(2) FOB Export Value	(3) Nominal Terms of Trade 1949 = 100	(4) Export Purchasing Power	(5) Variations in Terms of Trade (4) - (2)
1947	1,221	96	1,172	-49
1948	1,534	106	1,626	-92
1949	1,096	100	1,096	0
1950	1,322	124	1,639	+317
1951	1,716	90	1,544	-172
1952	1,290	73	1,161	-129
1953	1,354	118	1,598	+244
1954	1,312	97	1,273	-39
1955	1,181	102	1,205	+24
1956	1,200	121	1,452	+252
1957	1,100	94	1,034	-66
1958	982	93	913	-69
1959	1,000	94	940	-60
1960	977	88	860	-117
1961	1,066	97	1,034	-32
1962	923	83	766	-157
1963	1,069	96	1,026	-43
1964	1,073	114	1,223	+150
1965	1,180	147	1,735	+555
1966	1,271	117	1,487	+216
1967	1,191	100	1,191	0
1968	1,336	103	1,376	+40
1969	1,618	97	1,569	-49
1970	1,843	79	1,456	-387

Source: Banco Central and Centro de Contas Nacionais, FGV.

Table 6.6.
Brazilian Capacity to Import.

(1) Years	(2) Export Purchasing Power	(3) Foreign Capital Inflows	(4) Total Domestic Capacity of Pay- ments Abr. (4)=(2)+(3)	(5) Debts Amorti- zation	(6) Capital Remittan- ces Abr.	(7) Import Capacity (7)=(4)- -((5)+(6))	(8) Value of Imports	(9) Deficit or Surplus of Import Capacity (9)=(7)-(8)
1947	1,172	47	1,219	54	289	876	1,148	-272
1948	1,626	20	1,646	63	281	1,302	1,155	+147
1949	1,096	49	1,145	124	270	751	1,103	-352
1950	1,639	26	1,665	108	359	1,198	1,074	+124
1951	1,544	30	1,574	27	473	1,074	1,927	-853
1952	1,161	35	1,196	28	288	880	1,804	-924
1953	1,598	48	1,646	41	318	1,287	1,161	+126
1954	1,273	141	1,414	140	356	918	1,438	-520
1955	1,205	171	1,376	139	304	933	1,098	-165
1956	1,452	302	1,754	177	347	1,230	1,024	+206
1957	1,034	405	1,439	220	326	893	1,206	-313
1958	913	458	1,371	308	293	770	1,069	-299
1959	940	565	1,505	377	373	755	1,085	-330
1960	860	458	1,318	438	502	378	1,140	-762
1961	1,034	518	1,552	162	575	815	1,124	-309
1962	766	333	1,099	143	595	361	1,121	-760
1963	1,026	116	1,142	107	660	375	1,130	-755
1964	1,223	151	1,374	74	737	563	947	-384
1965	1,735	142	1,877	98	810	969	800	+169
1966	1,487	281	1,768	106	939	723	1,077	-354

Table 6.6.
Brazilian Capacity to Import. (Cont.)

In 1949 U.S. Constant Million of Dollars								
(1) Years	(2) Export Purchasing Power	(3) Foreign Capital Inflows	(4) Total Domestic Capacity of Pay- ments Abr. (4)=(2)+(3)	(5) Debts Amorti- zation	(6) Capital Remittan- ces Abr.	(7) Import Capacity (7)=(4)- -((5)+(6))	(8) Value of Imports	(9) Deficit or Surplus of Import Capacity (9)=(7)-(8)
1967	1,191	279	1,470	152	970	348	1,184	-836
1968	1,376	622	1,998	155	1,081	762	1,492	-730
1969	1,569	923	2,492	132	1,181	1,179	1,540	-361
1970	1,456	1,701	3,247	430	1,246	1,571	1,949	-378

Source: Banco Central and Centro de Contas Nacionais, FGV.

Furthermore, a stable Brazilian capacity of payments abroad has to be considered as a source for more intense capital movements, which contributed to ease the industrialization process, while the country was entering an unfavourable phase of her balance of payments. This seems to be the situation in the early sixties, a situation which could be favourably used as a basis to an adequate business squeeze, if the political developments had not fully altered the possible course of the events. In fact, when looking at the import capacity of the country in real terms (see table 6.6. column (7)), squeezes of this capacity do not allow to see radical changes in the position of this variable through all the period. The country was occupying a minor position in the international trade developments, despite some favourable commodities, and the relative stagnation of the trade was also a reflexion of this small participation in a growing world market.

On the other hand, there are some specific aspects which contributed to the slow-down of the Brazilian foreign trade. Firstly, we must refer to the unfavourable trade of primary commodities in the thirties and the excess capacity Brazil was presenting of these commodities. Secondly, the prolonged deterioration of the primary exports gave origin to a process of change in agricultural demand, with a gradual dominance of domestic orientated output. Thirdly, the strong industrialization policies which were promoted as a result of the failure of the traditional economic position of the country, reserved to the primary exports a traditional role and were restrictive to export demand for exchange resources. The combination of all these conditions - as we mentioned previously - contributed to , and expressed, the slow-down of the Brazilian foreign trade position.

The relative improvement of the export purchasing power which occurred in the period 1963-65 (see table 6.5. column (4)) could be a basis for additional expansion and a potential upward move in the juncture. As we mentioned in section 5.4.3., this favourable move in Brazilian foreign trade position was then coincident with a strong business squeeze, which was adopted by the Castelo Branco Administration, and we analyse in chapter 7, how this occurred. Since the Brazilian Public Authorities decided to implement more expansive policies only in 1967, a year of less favourable circumstances abroad (the Suez crisis) then the expansion was more based on capital inflows resources than trade improvement. (see table 6.6 column (3))

Thus, a final observation must be stated, i.e. the conditions of foreign trade, while less favourable in the fifties than in the forties, were good enough to promote favourable capital inflows and stable Brazilian capacity of payment abroad. Due to more isolated international conditions in the fifties and early sixties in regard to the Brazilian capital market, the country showed a reduced capacity to gather abroad as large capital resources as should be necessary to the by then promoted extensive industrialization. This difficulty was certainly aggravated by the import-substitutive character of the Brazilian industrialization which produced suspicion abroad to excessive nationalism. As to complement this difficulty, the Brazilian business cycle seemed, at first, to move in a different

trend than the Brazilian foreign market. As a result, a considerable amount of growth obtained through domestic financing and capital inflows was squeezed by recessive trends, which became reinforced also by recessive policies. Under these circumstances, a minor capacity to use the favourable moves of the foreign trade position seems to be certainly the main explanatory reason to the downswing prolonged effect of 1964—1967.

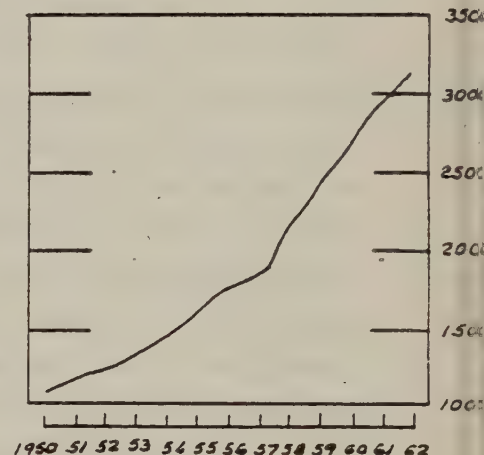
6.3.2. The Performance of the Industries in the Manufacturing Sector

The figure 6.3 shows the favourable performance of the industrial output which characterized the period 1950—1962. An upward kink is clearly visible from 1957 onward, as an expression of the more rapidly achieved growth. The average year rate of expansion of the industrial product was over 9.5 per cent, what is an appreciable record, in real terms.

FIGURE 6.3

While the rate of industrial employment grew proportionally greater than the demographic rate in the period, its expanding effect was slowing down, when compared with corresponding figures of the forties. The explanation of these less impressive figures of industrial employment could be found in the impact of the new imported technologies, especially in the case of ventures with international corporations. They promoted the use of equipment of labour-saving characteristics in the country. Especially the use of Instruction 113, contributed to overall gradual adoption of more capital-intensive equipment, what can explain the slowdown of the employment rate in the manufacturing industries.

INDUSTRIAL OUTPUT



PHYSICAL OUTPUT
1949 = 100

It seems adequate also to interpret this shift to capital intensive equipment as a result of the Brazilian high dependency on imported technologies. This fact lets in the small run to domestic options, since the adopted technologies have to be found among those available at cheaper prices in the international market.

During the manufacturing surge of 1957—1962, the Government Authorities were not fully satisfied with the rate of industrial expansion, since they supposed the economy could grow more rapidly than already achieved. The same opinion can not be maintained if we check the pressures on imports and the domestic position of inventories. These indicators show that the country was running close to its full capacity.

It was natural that the more rapid growth contributed to a strong mobility of factors in the country. The expansion of transportation and cargo facilities were counterworking the traditional trend for the growth of local centres of manufacturing activities in the different regions. The Government Authorities certainly underestimated, during this period, the negative effect of manufacturing

concentration and the formation of oligopolies in several branches. The mentioned negative aspects became more visible in the late sixties and in the seventies, but the formation of the oligopolistic forces can be traced back to this surge of 1957-1962.

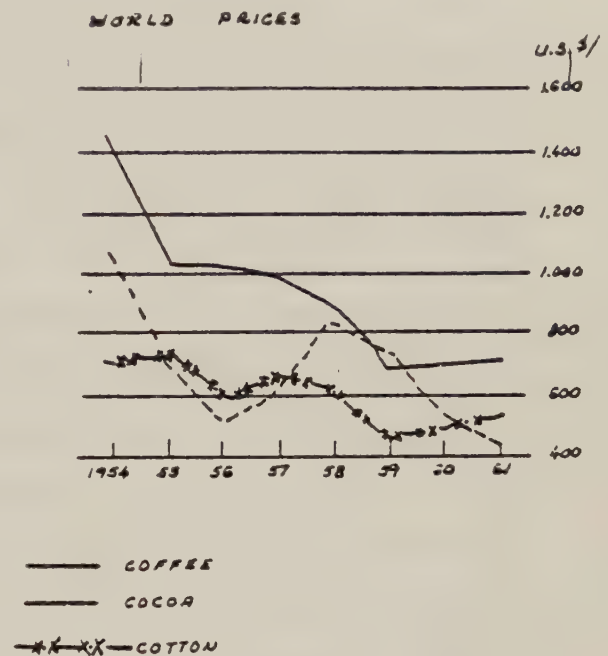
Indeed, during this expansive period of the late fifties, some regions, like Northeastern, or states, as Rio Grande do Sul, became clearly in lag in relation to Southeastern Region. This acceleration of the regional maladjustments was expressing the advantage in natural endowments of other regions or states, which were reinforced by the opening of previously unused potentials to exploration. In fact, while the rate of industrial growth also became accelerated in the less developed regions and states, the changes in relative prices of factors and the orientation of the Government resources were unfavourable to the less endowed regions or states.

Eventually, State organs were produced to counterwork these factors' development. These organisms, notwithstanding their important character, were coming into function with reduced amounts of resources, insufficient power and slow construction. In this period, the most well-established of these organs was SUDENE (Superintendency of the Development of Northeastern Region).

In the period 1950--1960, the industrial output grew in nominal terms by ca. 10 times in relation to yearly basis. The working population in the manufacturing industries grew at an annual rate of 3.3 per cent and São Paulo was the state which occupied more than 32 per cent of the industrial workers. The manufacturing expansion of Paraná led this state to displace Pernambuco as the sixth industrial basis in the country, a fact which reinforced the previous existing regional disequilibrium between North and South areas.

Food and beverage branches were responsible for 26 per cent of the total value of the manufacturing products in 1960, and thus decreased their relative participation. Metallurgical branches and non-metallic processing moved to the first position in the manufacturing sector, a position which is considered by excluding the traditional Food and beverage branches referred to above. Later this position would come back re-occupied by chemical and pharmaceutical branches, due to the more rapid expansion of heavy oil & derivatives processing. Transportation, electrical and communication branches expanded especially in the second part of the fifties, playing thus an important role in the integration of the nationwide market. Aside from these changes, the industrialization had come to a degree in which a broad substitution of handicraft industries was giving their places to modern in-

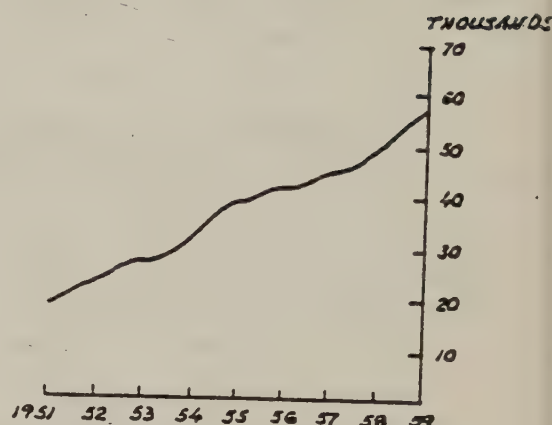
FIGURE 6.4



dustrial plants, concentrating in this way the manpower, the capital resources and increasing the productivity. The expansion of the merchant fleet and of automotive branch contributed to a gradual reduction of the importance of the railway system and this phenomenon certainly influenced the postponement of several expansive projects scheduled in the National Railways Plan. The Government Authorities became more oriented to complementarity between steel and iron and automotive industries, thus making an option which would reflect late in the process toward income concentration.

FIGURE 6.5

TRACTORS IN USE



The insufficient railways network which existed in the country had been produced for the purpose of exports, and thus it was not adequate to the demands of a growing domestic market. The network was a little modernised during Vargas' period, and the creation of FNV plant made part of the basic scheduling of the P.N.F. (national railways plan). But huge investments were still demanded to be made to equip FNV as a major domestic supplier, and these resources would have, in practice, to be used as alternative either by railways or by automotive expansion. The expansion of the automotive branches, which were committed in the middle fifties, represented an option against the railways developments at the stage of developing the country was entering on. It seems to be that the Public Authorities were estimating the changes promoted by automotive expansion as more desirable than those which could be promoted by an additional expansion of railways. In the literature of the late fifties and early sixties the debate became registered as if the option produced considered automotive branches as more capital-inducing than railway expansions.

Let us consider the conditions of an index of "total productivity", which is achieved by dividing the real value of the domestic product by the working population in the country. This variable will be explained first by gross capital formation (VI) and then by gross domestic product (VII). The adherence of another variable to explain the GDP can, thus, both (a) be compared to the benchmark of equation (VII) and (b) to the behaviour of gross capital formation in equation (VI). The year of 1949 was set as basis 100.0 of the total productivity index. The following equations (from (3) to (17)) give us comparative information.

(1) Nominal Gross Capital Formation:

$$GI_p = -23.4085 + 6.606 \text{ GCFO} \quad (\text{VI}) \quad (1946-1966)$$

$$t = 12.336$$

$$R^2 = 0.8890$$

- (2) Nominal Values of Gross Domestic Product (1947-1966)

$$GI_p = -22.3808 + 6.7994 \text{ GDP (VII)}$$

$$t = 12.941$$

$$R^2 = 0.9026$$

- (3) Now we use the GDP in 1949 constant prices as the dependant variable:
Footwear (lagged 1 year, i.e. Fot -1) (1944-1957): (Physical Index).

$$\text{GDP} = -54.825 + 2.811 \text{ Fot -1 (VIII)}$$

$$t = 7.7087$$

$$R^2 = 0.8458$$

- (4) Textiles (-1) physical output index (1944-1957)

$$\text{GDP} = -101.5063 + 3.21311 \text{ Tex -1 (IX)}$$

$$t = 7.7087$$

$$R^2 = 0.8031$$

- (5) Pharmaceutical branch (-1). Physical output index (1944-1957)

$$\text{GDP} = 39.057 + 1.8817 \text{ Ph-1 (X)}$$

$$t = 6.6705$$

$$R^2 = 0.8018$$

- (6) Rubber (-1). Physical output index (1944-1957)

$$\text{GDP} = 100.707 + 1.224 \text{ Rub-1 (XI)}$$

$$t = 11.0822$$

$$R^2 = 0.9178$$

- (7) Civil Construction (-1). Physical output index (1944-1957)

$$\text{GDP} = 47.879 + 1.947 \text{ C.C. -1 (XII)}$$

$$t = 4.3829$$

$$R^2 = 0.6359$$

- (8) Tobacco branch (-1). Physical output index (1944-1957)

$$\text{GDP} = 127.205 + 1.0089 \text{ To -1 (XIII)}$$

$$t = 30.886$$

$$R^2 = 0.9886$$

- (9) Drinks and Beverages (-1). Physical output index (1944-1957)

$$\text{GDP} = 56.1478 + 1.697 \text{ D\&B -1 (XIV)}$$

$$t = 11.112$$

$$R^2 = 0.9182$$

- (10) Foodstuffs (-1). Physical output index (1944-1957)

$$GDP = -27.806 + 2.466 Fo -1 \quad (XV)$$

$$t = 12.5385$$

$$R^2 = 0.9346$$

- (11) Paper (-1). Physical output index (1944-1957)

$$GDP = 44.210 + 1.8129 Pa -1 \quad (XVI)$$

$$t = 13.093$$

$$R^2 = 0.9397$$

- (12) Iron & Steel (-1). Physical output index (1944-1957)

$$GDP = 144.204 + 0.8644 I\&S -1 \quad (XVII)$$

$$t = 27.733$$

$$R^2 = 0.9859$$

- (13) Glass & Ceramics branches (-1). Physical output index (1944-1957)

$$GDP = 79.991 + 1.3853 G\&C -1 \quad (XVIII)$$

$$t = 13.936$$

$$R^2 = 0.9483$$

- (14) Cement production branch (-1). Physical output index (1944-1957)

$$GDP = 141.316 + 0.8923 Ce -1 \quad (XIX)$$

$$t = 13.5661$$

$$R^2 = 0.9436$$

- (15) Mineral extraction (-1). Physical output index (1944-1957)

$$GDP = -15.148 + 2.504 Me -1 \quad (XX)$$

$$t = 9.0244$$

$$R^2 = 0.8810$$

- (16) Consumption Goods Production (-1). Physical output index (1944-1957)

$$GDP = -0.5430 + 2.7116 CoG -1 \quad (XXI)$$

$$t = 15.3874$$

$$R^2 = 0.9556$$

- (17) Industrial total manufacturing product (-1). Physical output index (1944-1957)

$$GDP = 5.321 + 2.1675 MOut -1 \quad (XXII)$$

$$t = 22.0624$$

$$R^2 = 0.9779$$

(18) Production Goods (-1). Physical output index (1944-1957)

$$\text{GDP} = 105.647 + 1.2507 \text{ PGo} -1 \quad (\text{XXIII})$$

$$t = 14.411$$

$$R^2 = 0.9497$$

(19) Electric Power (-1). Physical output index (1944-1957)

$$\text{GDP} = 57.095 + 1.763 \text{ EP} -1 \quad (\text{XXIV})$$

$$t = 28.246$$

$$R^2 = 0.9864$$

6.3.3. An Interpretation of Empirical Findings

Let us first comment the simple regressions of the previous section. Our first observation when looking at equations (VI) and (VII), the two examples which were fitted against a global index of productivity, is that these two regressions show an adequate mutual relationship between labour, product and investments. This seems to support our view on overall promoted expansion in the import-substitution period. The developments of gross capital formation and domestic product were clearly exponential in relation to the index, which supports our view on an intense complementarity among the main economic aggregates in this period of growth.

As we look at GDP as a dependent variable, the regression equations (VIII), (IX), (XX) and (XXI) show the sharpest slopes. These regressions point out the fact that traditional production played the dominant role in the period of reference (1944-1957) i.e., until the surge of 1957-1962. This indication is in full accord with our basic analysis of the period, supporting thus our standpoint of intense domestic orientation of the market forces and State investments.

The more visible relationship of the most of the regression equations points out, when they are compared, toward a strong growth of the light industries and the basic support these branches received from heavy industries. For example, Cement output (XIX) is more associated as an explanatory variable to GDP than civil construction, a fact which indicates a high marginal consumption of cement. Branches as different as Tobacco (XIII) and Iron & Steel (XVII) show approximate coefficients, which may be interpreted as an indication of the overall character of the expansion in the period.

The GDP function seems thus to be adequately related to the development of the physical output of the most important manufacturing activities. This shows the expansive forces comprised in the period basic urban consumption and consequently we can understand these forces as part of the interplay of formation of the domestic market and industrialization.

Let us now adjust other functions, in order to shed some light on our basic assumptions.

A) The Deposits Function.

As to adjust time series to the period 1948—1965 and produce the deposits function we have used in this section, we employed the nominal index of deposits of Fundação Getúlio Vargas. The period was also divided into two characteristic parts, the first 1948—1956 and the second 1957—1965. The reason why we did not employ it before in deposits functions was that it is not available for the whole previous period. We also divided this period into two parts because this allow us to prospect the shifts occurred in the functions of the period.

We obtained the result that follows to the first period, when considering non-agricultural gross income as the explanatory variable:

$$\bar{S}_D = -76.986 + 3.861 Y_{nag}^G \quad (XXV)$$

$$R^2 = 0.9906$$

$$t = 280.14$$

This regression equation shows a very strong relationship between the non-agricultural income, as the explanatory variable, and the index of total deposits, as computed by FGV. The relationship is also clearly stronger than that we found for the period 1939—1947, as characterized by regression equation (II). This seems to support our hypothesis that the non-agricultural activities were relying on agricultural savings to perform the rates of expansion they were then presenting (see period 1939—1947).

We shall now look into a similar relationship, but specifically one that relates the gross agricultural income as the explanatory variable to the deposits index of FGV. The result is as follows:

$$\bar{S}_D = -10.243 + 1.134 Y_{ag}^G \quad (XXVI)$$

$$R^2 = 0.9992$$

$$t = 3306.06$$

This result is also stronger than the one we previously found with regression equation (III), and this fact can be interpreted by the hypothesis that agriculture income also in this period was in closer intimacy with the level of bank deposits. Another enunciation can be that while the non-agricultural income improved its relationship with the deposits in this period (1948—1956), the prevailing fact was that the agricultural income remained with the dominant role when explaining deposits in the banks. The adoption of this interpretation supports our view that agricultural activities remained transferring resources to the non-agrarian activities, being thus the interpretation in a consistent position with our analysis of the import-substitution features.

$$\bar{S}_D = -25.629 + 1.0077 \Delta Y_d^N \quad (XXVII)$$

$$R^2 = 0.9153$$

$$t = 29.8842$$

The relationship of the explanatory variable "increment in the disposable income" (nominal) with the deposits index will produce, see under (XXVII) former page. We see that the increment in the disposable income also presents a strong relationship with the index of deposits, a fact that make us suppose that in this second period (1948-1956) the disposable income played, through the effect of its increment, a role less important than in the preceeding one (1939-1947).

Let us now add the performance of the gross agricultural income to the explanatory power of the non-agricultural income, in order to explain the deposits function:

$$S_D 48-56 = 107.9054 + 0.12207 Y_{nag}^G - 0.46063 Y_{ag}^G \quad (XXVIII)$$

$$R_{Y.12}^2 = 0.9742$$

$$S_{Y.12} = 7.372 \quad S_Y^2 = 2,107.49$$

The slope is not as pronounced as the one we found in (IV), which seems to point to a more "normal" relationship among the variables. The basic supposition here would be that non-agricultural income was gradually substituting the position of the agricultural income in the dominant force to explain the deposits function. The coefficient of determination is also stronger than in (IV), a phenomenon that can be interpreted as a relationship with a reduced degree of disturbances in the period.

Let us now include the deposits function in the model the increments of nominal disposable income, and appreciate the results:

$$S_D 48-56 = -27.0424 + 0.29819 Y_{nag}^G + 0.16272 Y_{ag}^G + 0.25368 Y_d^N \quad (XXIX)$$

$$S_{Y.123} = 6.683 \quad R_{Y.123}^2 = 0.9788$$

We see here that, in opposition to the result we achieved previously with model (V), now the inclusion of the year-based increases in nominal disposable income does not improve radically the results, what could be interpreted in terms as, if the expansion of the disposable income (nominal) was less important in this period than in the previous one of 1939-1947. This interpretation seems to be reasonable, because once in the period 1939-1947 there was a strong repressed demand.

When considering the partial coefficient of determination r_{Y1}^2 , the relationship between the deposits index and the explanatory variable non-agricultural income - if we ignore the relationship with gross agricultural income - then becomes:

$$r_{Y1}^2 = 0.9906$$

- which is the same result we obtained in (XXV).

When considering the second period (1957-1965), the deposits functions obtained were: using as explanatory variable non-agricultural income:

$$S_D = 1059.511 + 3.1079 Y_{nag}^G \quad (XXX)$$

$$R^2 = 0.9376 \quad t = 41.0558$$

If we consider the hypothesis of using agricultural income (gross), the result would be:

$$S_D = 215.195 + 0.89112 Y_{ag}^G \quad (XXXI)$$

$$R^2 = 0.9502 \quad t = 51.7887$$

The samples are adequate and the explanatory power is high. Let us look into a similar relationship with increases in nominal disposable income per se:

$$S_D = 586.667 + 1.6576 Y_d^N \quad (XXXII)$$

$$R^2 = 0.8447 \quad t = 15.6581$$

This result apparently indicates a decreasing role of the increment of nominal disposable income as explanatory factor of the index of deposits in all banks. This seems to indicate both (a) a decreasing performance of increases in nominal income under inflationary expectations and (b) that the domestic savings in this period were generally depending more of the productive activities than of the expansion of individuals' income. Saying the same thing in another way, it seems to be the case that the individuals were consuming additional income more than before, and this would point to expansive output of consumption goods, which in fact occurred, as we can see in the single regression equations (VIII) to (XXIV). Both interpretations are adequate to the supposition of higher public and corporate savings, in connection with industrial expansion.

Let us now add the performance of agricultural income to the explanatory power of the non-agricultural income in the deposits function above, and analyse both factors in the period under study (1957-1965):

$$S_D \text{ 57-65} = 40.18209 + 0.214996 Y_{nag}^G + 0.174791 Y_{ag}^G \quad (XXXIII)$$

$$R_{Y.12}^2 = 0.8237$$

$$S_{Y.12} = 187.042$$

$$S_Y = 2450.06$$

While the contribution of non-agricultural income is greater to the position of the deposits function, the relative participation shows a strong contribution of the agricultural income. This is in accordance with our interpretation that the agricultural sector was used as a primitive market. The fact that sustained industrialization was achieved, and consequently large resources were gathered within the non-agricultural sector, did not eliminate the condition

of using agricultural savings to finance industrialization. These characteristics of the Brazilian industrialization are important, once agricultural activities normally consume a high amount of resources to produce a balanced growth.

When giving to the model its full expression by including the increases of disposable income, we achieve:

$$S_D 57-65 = -130.670 + 0.1746522 Y_{naG}^G + 0.1706274 Y_{ag}^G + 0.126611 \Delta Y_d^N \quad (XXXIV)$$

$$R_{Y.123}^2 = 0.9047$$

$$S_{Y.123} = 59.624$$

It now becomes clear, our previous observation that the increase in nominal disposable income decreased its participation as an overall explanatory factor, and the period (1957-1965) coincides with the major industrial expansion, the inflationary pressure, the swing, the change of regime, etc. We can see a stronger participation of the gross agricultural income, which presents a position quite near the non-agricultural. Thus, the abandonment of the import-substitution industrialization may be interpreted, in terms of this result of savings mechanisms, as not commanded by economic pressures.

The partial coefficient of determination, r_{Y1}^2 is 0.9375, which is approximately the same result we obtained in (XXX). The coefficient of determination is now $r_{Y3.12}^2 = 0.4594$

As we know, this partial coefficient of determination gives the exclusive improvement that variable "increases of nominal disposable income" brings with it when included in the model. In comparison with (V), the mentioned variable improved now the explanatory power by ca. 46 per cent, while it had then improved the model by ca. 85 per cent (period 1939-1947). The explanatory hypothesis to this effect is that individuals' savings contribute to half in 1958-1965 of what they did in the period 1939-1947. This is also an interesting discovery, when considering it does express the decreasing performance of inflation and domestic purchasing power at home to induce the economic growth.

B) Traditional Output as a Consumption Function.

A first approach of the consumption function has been written as:

$$C_t = a + bY_t + cC_{t-1} + E_t \quad (1)$$

which simply is a detailment of Keynes linear expression:

$$C = a + bY \quad (2)$$

meaning of (2), that "consumption is a function of disposable income".

Accepting the Keynesian hypothesis, we assume the following assumptions:

(a) that the traditional Brazilian output for consumption is equal to the traditional consumption, once this output is fully consumed; (we can consider the marginal exports equal to the marginal imports)

$$O^t = C^t$$

(b) that, if (a) is correct, then traditional output is a function of disposable income, i.e. using disposable income as an explanatory variable, it practically explains the variations in traditional output or traditional consumption;

$$O^t = a + b Y^d \quad \text{or} \quad C^t = a + b Y^d$$

Given the above assumptions, let us develop further our conditions:

(1) once we know that the traditional output was more connected with lower-income urban strata, then we can add the hypothesis:

(c) that 80 per cent of the lowest income earners will be more "explanatory" of "traditional consumption" than other income earners;

(2) In order to make this hypothesis quantitative, (c) we proceeded as follows:

- deflated the available values of the income tax payers, according to percentiles, by the implicit deflator of net income of National Brazilian accounts;

- assuming this represents a normal distribution, we distributed the values back to the past according to their trends, obtaining thus a complete series of the samples available, covering the intermediate years;

- we identified the values of the samples with the aggregated value of the National accounts, ignoring that a part of lower income earners do not pay taxes (personal, while paying other taxes). This proceeding is considered to produce a small upward bias to the lowest income strata (lowest 40 per cent), a fact which is considered as random phenomena for the effect of statistical use. We also assumed this bias to be non-relevant, once the resulting lowest strata would be near its real position, by this processing, than it would be otherwise if computed differently.

(3) Once we know that - under import-substituting conditions - price-lowered imports also supported "traditional output", then we will include a "nominal index of imports" as an explanatory variable in the model. Thus, this import index can also explain the "traditional consumption" in some way. We may now make another assumption:

(d) that the next 40 per cent of income earners will be able to complete the explanatory power of a "traditional consumption" function;

Let us now resume our variables, in order to write this "traditional consumption" function:

$$O^t = C^t \quad \text{traditional output; traditional consumption, assumed to equal.}$$

(Empirically, it is the industrial physical output index - Food processing of F.G.V.)

Y_L^d = disposable income of lowest 40 per cent of the income earners.

I_i^N = nominal index of imports (1953 = 100.0)

Y_N^d = disposable income of next 40 per cent of the income earners.

Now, we can write the model as:

$$C^t = a + b Y_L^d + c I_i^N + d Y_N^d$$

and we can empirically check our "traditional consumption" function. Let us do the same thing with data for the period 1947—1964.

We will firstly consider the disposable income of the lowest 40 per cent incomed-strata, as the explanatory variable. Let us remember that $O^t = C^t$ is the physical output index of food-processing industries, computed by FGV.

$$C^t = 12.431 + 0.1506 Y_L^d \quad (XXXV)$$

$$R^2 = 0.8268 \quad t = 21.0032$$

It is possible to observe a strong explanatory power of the lowest 40 per cent incomed-strata to food-processed output as traditional consumption. Since, this output is fully consumed at home, then we can consider this output equal to consumption. We will now consider the explanatory power of the nominal index of imports:

$$C^t = 99.57 + 0.0704 I_i^N \quad (XXXVI)$$

$$R^2 = 0.0246 \quad t = 0.6430$$

This result is surprisingly low, once we expected a higher participation of the import index in the changes of "traditional consumption". However, this fact can be interpreted by the hypothesis that a small amount of the foods processed to consumption was being imported under import-substituting conditions. Thus, the result seems to indicate decreasing imports of food processed, what would confirm "the import-substituting" character of the period.

Let us establish another relationship, where the explanatory variable will be the disposable income of the "next 40 per cent" of incomed-strata.

$$C^t = 27.122 + 0.5119 Y_N^d \quad (XXXVII)$$

$$R^2 = 0.8558 \quad t = 25.6616$$

An interesting observation on "the next 40 per cent" of disposable income attainers explains a bit more (3.5 per cent) than "the lowest 40 per cent". This may be interpreted as "the lowest 40 per cent" restrain more their processed-food spendings than "the next 40 per cent" are induced to do it. This is reasonable, since the lower-incomed strata may preferentially prepare more of their own food than those who pertain to strata which own larger incomes. The adoption of this hypothesis, in accordance with current consumer theories, also makes evident the general low level of income in the country, as we mentioned previously in section 6.2.1.

Let us now add the performance of the nominal index of imports to the explanatory power of "the lowest 40 per cent incomed-strata", in order to explain a more sophisticated "traditional consumption" function:

$$C_{47-64}^t = -36.24133 + 5.4577 Y_L^d - 0.08843 I_i^N \quad (\text{XXXVIII})$$

$$R_{Y.12}^2 = 0.9586 \quad S_Y^2 = 1770.163$$

$$S_{Y.12} = 8.56$$

Thus, disposable income of the "lowest 40 per cent incomed" individuals and "traditional consumption" expansions are related to a marginal decrease of imports, which is consistent with import-substitution characteristics of the period. The model also explains ca. 95 per cent of "traditional consumption" or "traditional output". The result can be considered as satisfactory.

We will now develop the full model by the inclusion of the variable "disposable income of the next 40 per cent incomed individuals".

$$C_{47-64}^t = 171.884 - 41.12282 Y_L^d - 0.31834 I_i^N + 14.0054 Y_N^d \quad (\text{XXXIX})$$

$$R_{Y.123}^2 = 0.9534 \quad S_{Y.123} = 449.687$$

When only considering the relationship of the dependent variable and the "lowest 40 per cent", we have: $r_{Y1}^2 = 0.8267$, which is approximately the result we achieved in (XXXV).

If we consider "dependent variable" and "nominal import index", being "the lowest 40 per cent" fixed, we have: $r_{Y2.1}^2 = 0.9862$

and by including the four variables, the strength of association between "dependent" and "next 40 per cent" is:

$$r_{Y3.12}^2 = 0.1256$$

This seems to affirm both the strength of the multiple regression model and the auxiliary explanatory value of the "import nominal index". It also confirms the

"traditional consumption" function as one of the lowest 80 per cent incomes individuals in Brazil during the period 1947—1964. The result is thus in accordance with the supposed overall character of the growth process in the period, based on import-substituting industrialization.

C) Disposable Income Function.

As we know from income analysis, there are conceptual and statistical differences between GDP, GNP and disposable income. Without entering here a detailed discussion, some of the statistical and conceptual differences are visible from table 6.7. As we see in the table, in the year 1949 the adjusted values show a statistical difference between GNP and disposable income equals to 37.1 billion of real cruzeiros. Conceptually we can say that disposable income is a function of tax payments, income retained by producers and additional income payments, since we have a given GNP value.

Once we know that "net income sent abroad" (NISA) is a variable which expresses a decrease on real disposable income, - due to the fact it expressed costs abroad for previous income expansion - then let us include this variable NISA in the place of additional income payments and appreciate empirically the results. If a good adjustment is produced by this model, then the hypothesis mentioned below can be accepted as an explanatory assumption:

(a) that capital inflows and services from abroad should increase the disposable income, in a period in which nominal increases of disposable income should be reducing their marginal expansive effect in real disposable income;

(1) this hypothesis can be formulated based on the characteristics of import-substituting industrialization that we explained before, for instance, of presenting growing exchange scarcity.

The model is:

Y^d = disposable income (gross)

T_p = Tax Payments to Government.

Y_r^p = income retained by producers.

Y_{SA}^N = net income sent abroad (NISA)

$$Y^d = a + b T_p + c Y_r^p + d Y_{SA}^N$$

Let us now check this model for data of the period 1947—1964. We will firstly consider "tax payments" as explanatory variable to "real disposable income"

:

$$Y^d = -3.4 + 0.19531 T_p \quad (XL)$$

$$R^2 = 0.9736$$

$$t = 149.3693$$

As we see, a strong explanatory power is expressed by "tax payments". The result was foreseeable, since we kept in mind the conceptual premise.

We will now consider the explanatory power of "income retained by producers":

$$Y^d = 9.593 + 0.0588 Y_r^p \quad (\text{XLI})$$

$$R^2 = 0.9714 \quad t = 137.8818$$

The explanatory power is also strong, while a bit less than "tax payments". As we see, these variables keep a high relationship with disposable income. They may, indeed, be considered as the difference between GNP and disposable income, being thus submitted to similar forces of change, while changing in different directions. We will now look into the explanatory power of net income sent abroad (NISA):

$$Y^d = 0.72178 + 0.00571 Y_{SA}^N \quad (\text{XLII})$$

$$R^2 = 0.5445 \quad t = 6.4799$$

It is also clear hypothetical from the result: that NISA is shaped by a different set of forces than of those which work out the disposable income.

Let us now add the performance of "income retained by producers" to the explanatory power of "tax payments to Government" and see the resulting disposable income function:

$$Y_{47-64}^d = 320.284 + 0.434241 T_p - 1.44190 Y_r^p \quad (\text{XLIII})$$

$$R^2 = 0.9920 \quad S_Y^2 = 17515.29$$

$$S_{Y.12} = 11.870$$

The result is highly compatible with a supposed expansive effect of "tax payments" in "disposable income". This seems also to point out the expansive character of the Government receipts into the economy. Thus, the general shape of the model is interpreted as to support our general hypothesis. If we include the variable "net income sent abroad", the result is:

$$Y_{47-64}^d = 251.957 + 0.489244 T_p + 0.1469 Y_r^p + 8.7257 Y_{SA}^N \quad (\text{XLIV})$$

$$R_{Y.123}^2 = 0.9983 \quad S_{Y.123}^2 = 519.488$$

If we only consider the relationship of the dependent variable and "tax payments to Government", we achieve:

$$r_{Y1}^2 = 0.9735$$

which is approximately the result we obtained in (XL).

When considering "dependent variable" and "income retained by producers" being "tax payments" fixed, we have:

$$r_{Y2.1}^2 = 0.6979$$

and, by including the four variables, the strength of association between "dependent" and "net income sent abroad" (NISA) is:

$$r_{Y3.12}^2 = 0.7875$$

which improves a great deal the results we obtained in (XLIII).

This seems both to affirm the strength of the multiple regression model and also the auxiliary explanatory power of NISA when included into a disposable income function of a developing country, in the period 1947—1964. The result shows the importance of capital flows into the process of growth and may be interpreted as an affirmation of the hypothesis (a) in this section "C". Simultaneously, these results seem to point towards the hypothesis of capital movements as phenomena in close relationship with the changes in real disposable income.

Table 6.7.

Disposable Income of Individuals.

Year 1949 Adjusted Billion of Cruzeiros

Gross National Product	194.4
Minus: 1. Tax Payment to Government	26.1
a. Excise and other Taxes	19.2
b. Corporate profit Taxes	1.9
c. Personal income Taxes	5.0
2. Income Retained by Producers	18.0
a. Capital consumption Allowances	13.2
b. Undistributed Profits	4.8
Plus: 1. Subsidies and Government Interest	2.9
a. Subsidies	0.24
b. Government Interest	2.66
2. Government Transfer Payments to Individuals	4.2
Equals: Disposable Income	157.3

Source: Centro de Contas Nacionais, FGV; FIBGE; and Banco do Brasil.

7. THE BUSINESS ADJUSTMENT.

"The dismay and uncertainty as to the future which accompanies a collapse in the marginal efficiency of capital naturally precipitates a sharp increase in liquidity preference- and hence a rise in the rate of interest. Thus the fact that a collapse in the marginal efficiency of capital tends to be associated with a rise in the rate of interest may seriously aggravate the decline in investment. But the essence of the situation is to be found, nevertheless, in the collapse in the marginal efficiency of capital, particularly in the case of those types of capital which have been contributing most to the previous phase of heavy investment. Liquidity preference, except those manifestations of it which are associated with increasing trade and speculation, does not increase until after the collapse in the marginal efficiency of capital."

J.M. Keynes (1).

7.1. Introduction.

Some circumstances can be referred to in connection with the adjustment policies adopted by the military government, which came into office in 1964. The first circumstance was political instability, which was an immediate cause of the establishment of the military power. The military government then gradually eliminated the country's democratic order. The second element was -in the economic sphere- the phenomenon generally characterized as the "depletion of the mechanism of import-substitution". This so-called depletion of the import-substitution industrialization may in long term be considered as the indirect cause for the political climate of the crisis. The third element, also a long run component, was the growing uncontrolled Public deficit mechanism. A fourth related circumstance is the increased trade imbalance and exchange scarcity, which were characteristic in the period 1957-1967.

The importance of each of these circumstances, as well as the exact interrelationship between them, is difficult to pinpoint. The four factors mentioned above are even to some extent, redundant. However, these four elements are, I believe, the main elements necessary to produce a satisfactory understanding of the conditions which originated the Brazil of post-1964.

The period 1958-1962 was not favourable to international trade expansion in the Latin American Countries (LAC). The prices of industrial commodities rose more favourable than the prices of the primary commodities usually produced in Latin America. In fact, most of the local Regional primary commodities dropped in value, with a resulting deterioration in the purchasing power of the LAC. In 1962 and 1963 the rate of expansion in Europa decreased, and this constituted an additional factor for instability. These unfavourable trade conditions for the LDC contributed to downward movements in the business activities of se-

veral LACs. With regard to Brazil, the domestic difficulties also contributed to the acceleration of the rate of inflation and fostered a downward set of forces, which persisted through fluctuations and were even reinforced with the policies applied in the period 1964-1967 (2).

7.2. Castelo Branco Government (1964-1967).

This government constituted a rupture with the current group of forces that had ruled the country since the establishment of the Constitutional régime in 1945. Because of this it was free of compromises currently made by pressure groups which had prevailed previously. The economic programme that the new authorities adopted clearly emphasized this rupture. Their aimed policy was the reduction of the demand, which was considered excessive. Wages had to be squeezed and big enterprises were promoted, while the State-controlled sector would - in a parallel movement- gradually be reduced. Demand was felt by them to have become excessive due to the more-than expected expansion of the economy in the previous period (1957-1962). The main circumstances during that expansion may roughly be characterized as : (1) strong domestic inducement of overall investment (including foreign borrowings and association); (2) stagnation of the country's trade position (and also LAC Region) in the world business situation; (3) the persistence of a deficit in the nation's balance-of-payments, since 1957, in coincidence with a growing indebtedness domestically and abroad.

In order to remedy this situation, a series of business adjustment measures were then taken, as well in the fiscal as in the monetary fields. What were the features of the measures then adopted by the Government authorities? What were their objectives?

The objectives were presented through three points: (1) to combat inflation; (2) to reactivate the economic growth, in different basis; (3) to redress the critical foreign debt position. For these purposes, the Government implemented institutional changes, including both political and administrative reforms. A large number of the administrative Federal and state officers, as well as managers in the State-controlled corporations were ousted, on the assumption of having made unacceptable political compromises during the previous state-of-affairs. Thus, the Government structure was simultaneously reorganized to reduce the costs of its traditional machinery.

7.2.1. Business Squeeze and Economic Policies.

The choice for policies which reduced the overall deficit of Government (but not of the Nation) was also an instrument to promote the centralisation of decisions in the Federation , as well as of reducing or eliminating the Congressional authority in a series of critical Public issues. The country lost its democratic character, but the Public deficit persisted (3). The method which the Public authorities used to implement the business

adjustment is known as "shock treatment" (4). With this program, a strong reduction of demand was considered to be adequately created by the desactivation of the Public expenditures, and credit squeezes were simultaneously claimed to be the cheapest way to relaunch the adjustment waves in the economy. Afterwards, the Public authorities should have to use the reduction of the Public expenditures as a source for stimulating domestic savings of private character, being thus this factor a permanent condition for both the reduction of induced and of Public savings. Higher interest rates, trade and exchange liberalisations would further contribute to the development of domestic savings and thus contribute to the expansion of the market mechanisms. This, thus, would certainly largely promote efficiency, while increasing, in the origin, unemployment. The "shock treatment" had thus political as well as an economic importance. Due to the change in the régime, the forces which could react against it were -at the market level- immediately subjected to a credit squeeze, since the control of the credit was in the Public hands. This reduced much the potential opposition in the private sector and paradoxically expanded the power of the State economic authorities.

A) Demand Squeeze.

Government's aim was to manipulate prices to adjust first the excess demand, achieving thus net decreases in consumption. Through the reduction of the total expenditure, some shifts could be produced in order to eliminate gradually the deficit of the Cash of the National Treasury and settle the position of the balance of payments into some degree of equilibrium. Thus, the whole package was intended to create downward movements in the consumption function. It also imposed import restrictions, new regulations for foreign exchange trade and, of course, wage squeezing.

A set of measures was designed to: (a) improve the taxation system, for the purpose of collecting more revenues; (b) carry out a liberalization of trade and of the exchange rates' policies; (c) reduce the deficit of the Cash of the Treasury, in order to permit a credit expansion exclusively to corporations considered to be sound.

With relation to the wages squeeze, the mechanism comprised both the reduction of the real wages through the control of nominal increases in the wages rates, and the proceeding with a general prices' race, which would reduce the cost of labour as a macro-productive component. The prices' rises also contributed to a squeeze in the supposedly excess demand, once the low income strata were forced to reduce much of their normal consumption in traditional items. Aside from increases both in the prices of the industrial Public services and in imported items, the Government removed the guarantees previously existing in the Labour Code to labour admittance, and set the labour unions, in their majority, under the Government's police intervention. As a result, increased labour mobility was combined with reduced credit to small business and these factors increased unemployment and contributed to falls

in the wages rates. Since the Government promoted the elimination of the subsidies to basic imported items, the resulting inflation was understood and used as a mechanism of the adjustment process (corrective inflation) (5).

The expectation of the Public authorities was that the adjustment could also eliminate a great number of corporations considered under inefficient management, or extremely in need for capital resources. The surviving enterprises could then be considered as strong enough to venture into a "sound market". The Administration purpose was to reactivate the rates of growth with the support of this sound private sector, led by a few big corporations, with which the Public authorities could dialogue when necessary.

B) Tolerance to Big Corporations.

The Government authorities wished to obtain larger inflows of capital in order to balance the recurrent costs for capital and capital goods imports as well as finance new ventures between foreign and domestic corporations. This purpose was partially produced through the new fiscal measures introduced but, on the part of the foreign capital market, the trend for outflows increased up to 1968. In relation to the structural measures of adjustment, the Government authorities were progressively induced to be tolerant and produced exceptions in order to favour international corporations. These changes were considered to reduce capital outflows and feeding in some extent stabilizing effects in the market.

7.2.2. Credit Restrictions and Inflation.

The so called "shock treatment" seems to have been a too strong a weapon against the excess demand, since it cut not only a large amount of the Public expenditure but also depressed extensively domestic industries which depended less on imports and consequently on exchange available. Recently, the policy then followed has been subjected even to official criticism, as a program which provoked a recession through having given priority to reduced demand and through having created a structural mechanism of embodied inflation, the indexation mechanism. Others describe this policy of reducing demand as the real cause for the depression (as they interpret) in the period 1964-1967 (6). This policy for excess demand-management was based on a view which indeed attributed an exceptionally important role to the macro-factors, considered as independent of the micro-economic conditions and causal. This was distorted because the largest enterprises in the countries were then producing with large unused capacities, and within this circumstance they were remaining as big demanders of capital, capital goods imports and consequently of exchange resources. Despite this fact, the Public authorities promoted policies which squeezed the consumer in general and -at the same time- gradually opened an array of exceptions advantageous to the big corporations. Although this, the small corporations and the traditional consumers remained under strong squeezes. The concern for these structural distortions was of minor importance at the Government level, and

this certainly much favoured the downward cumulative forces in the period. Thus, hoping to improve the price mechanism, the government established a strong new protectionism, in place of the previous preference to consumers of imports. While the less exchange-costly activities were prevented from continuing to expand, the Government made efforts to promote the most modern corporations, in order to stimulate their activities.

The unfavourable international market developments in the face of the Region's trade position in the period contributed to partially annul the efforts of the Brazilian authorities, through fluctuations. Tax reforms were oriented toward the promotion of productive investments, but the response was weak. The shortage of capital and acute fluctuations were interpreted by the Government as indicating a need for more selective credit and the resultant extensive unemployment was considered acceptable. This certainly produced the dominance of the recessive forces.

In part to counter the development of the recessive forces, the Government authorities implemented measures to rise exports, which could even absorb part of the domestic unused capacity. This more aggressive foreign trade policy was tailored by the Brazilian authorities in order to feed a cumulative movement upward, and this remained as a typical trace of the post-1964 set of economic policies. The reduction of administrative difficulties and the activation of bonuses on exports also contributed to a gradual raise in exports, especially with reference to more traditional items, as the case of the products currently domestic-orientated in the domestic manufacturing activities. Thus, the overall set of policies acted to reduce the influence of the domestic market and consequently to produce a structural shifting from the domestic consumption to exports, gradually stimulating in this direction the expansion of the domestic economy.

As part of the liberalisation programmes, the Government also implemented devaluations, in order to rise the domestic competitiveness abroad and stimulate the exports. The devaluations also stimulated the reduction of the imports and favoured exports- in a first phase- of the industries which were less import-demanders.

Quotation of U.S. dollar (In Added Percentage)

Year Period	Free	Imports
1961/60	53	22
1962/61	80	38.7
63/62	72	52
64/63	71	210
65/64	25	53.3
66/65	15.2	17.3
67/66	35	40

The additional contribution of devaluations was to reduce the cost of the domestic labour, rising the profitability of the corporations in general and thus inducing some degree of investments in non-imported capital goods. This especially contributed to the expansion of the demand for automotive vehicles (mainly automobiles) and industrial equipment which were produced at home. Thus, while the credit control was inadequate, its interplay with the stimuli to exports produced relative advantages to organise a new export sector, in replacement of the previously dominant policies of import substitution.

It is not easy to find out the causes for this new mix. An important aspect undoubtedly lies in the fact that the Government implemented several contradictory policies. They were also implemented at once, and they appeared to be resulting more of ideological causes than to be a result of a reasonable tentative method. Thus, it seems to be that some policies were not chosen according to a concrete interplay of economic forces, but they were inversely originated in expectations of the policy-makers. This overall reform of the economic policies was produced in a very fast pace, and this hurry could not allow the full maturation of the results, in order to promote balanced policies. As a consequence of this, some specific aspects of evaluation which should be required for introducing additional changes were not used as indicators or as the source of the eventual changes of policies (7).

As an example, the previous Government (Goulart) had produced an Instruction, N. 263, which we will use to characterize the problem mentioned above. The Instruction of Feb., 19, 1964, introduced free-exchange rate transactions on most of imports, with the exceptions made to items such as equipments imported by Petrobrás, imports of newsprint, oil and derivatives, wheat, government remittances abroad, as well as of exports of coffee, sugar and crude oil. Then, with the change in Power, a new Instruction, No. 270, of May 9th was made, Instruction which cancelled out the exceptions above mentioned and let be in use the single exception of coffee. Soon, in June, 2, the coffee position was also changed, then to be traded at free rates, and according to a new Instruction, this No. 272. Only in 1964, the Government authorities issued 21 instructions affecting money and exchange policies, phenomenon which show how determined was the Government in promoting business changes, but also show the potential lack of maturation of the measures promoted.

Similarly, it is also possible to conclude that most of the wages squeezing enforced was not necessary. When the military Administration came to power, the wages were already depressed due to the inflation rate and also as it had been effected by successive readjustments of wage rates under the inflation rate (8). A readjustment like this had still recently been produced by the previous Administration, readjustment which acted from May 1st, 1964, period at which the military were already in office. Despite this trend, the new government adopted a policy to promote additional squeezes in wages. The evolu-

tion of prices in the period 1964-67 reduced the real wages in more than half of its real purchasing power, which was clearly excessive. This also reduced, of course, much of the aggregate demand and thus contributed to the spread of bankruptcies through an extensive fall of manufacturing output. The need for this large business fluctuation was clearly unnecessary.

Business Transactions- Constant Prices (Added Percentage)

Period	Added Percentage
61/60	11.8
62/61	14.6
63/62	7.9
64/63	6.5
65/64	5.3
66/65	13.8
67/66	-9.6

Source: FGV

Ideologically, it is possible to understand this Government need for "purging" the market. But in practical terms, the structural changes could be promoted and sustained without so hard a pressure on wholesalers, investors, etc. It is clear that this strong compressing in the demand reduced the impetus of the expansive forces and, consequently, increased the costs of the future expansion. This inconsequence is also visible in the fact that the final purchaser was financed back in the market while a durables' purchaser, remaining while this the current traditional consumption under squeezes.

Official Data on Real Wages. Indexes (1964= 100)

Years	Nominal Index of Minimum Wages	Cost of Living in Rio de Janeiro	Approximative Purchasing Power of Minimum Wages
64	100	100	100
65	115	186.6	61.6
66	132	271.3	48.7
67	152	383.6	39.6
68	175	477.6	36.6
69	201	592.3	33.9
70	231	735.6	31.4
71	266	889.3	29.9
72	306	1050.3	29.1
73	352	1197.3	29.4
74	405	1361.5	29.7

Source: FGV and Ministerio do Trabalho (wages).

The facilities were restored and even improved on the side of the big corporations, which extensively paid the higher wages and demanded for more credit, since the Government could not resist their pressure. This contributed little to alleviate the shorter turnovers of these corporations, due to the fact of a high indebtedness of the larger corporations. Since the Government policies favoured concentration, it can be assumed that those enterprises remained in the period applying their traditional policies of borrowing, conglomerating and thus implementing reduced productive investments. With relation to small enterprises, and even branches as textiles, food industries, footwear, small domestic appliances, etc, their demand become extensively depressed. Thus, in this case, lower favourable wages rates were countered by reduced demand.

The effective explanation of the wages-freezing policy should certainly be found in the strong control of credit implemented by the Government authorities. It would be difficult to the Public authorities to reduce the amount of credit in order to put down the excess demand and simultaneously allow the movement of the wages rates in approximate accordance with the inflation rates. Once the labour unions were set under intervention and the changes in laws, as well as growing unemployment, reduced or eliminated the role of labour as an independent factor, then the Public authorities could present to the private sector these wage developments as an alternative source of profits and efficiency in the corporations. In this sense, the workers were interpreted as the source of excess demand. This demand supposedly operated through the workers' claim on wages adjustments. The cut to reduce the workers' propensity to consume may thus be envisaged as a manipulation in a specific consumption function, another than that of the durables' consumers.

It is natural to interpret the resulting effect of reduced workers consumption as an option which the Government authorities produced in favour of further income concentration. This is clearly connected with the rising of durables' market, supported this market in consumers of higher incomes. The preparation of a new cycle, through a cumulative upward movement, was conceived thus to be based on a new pattern of consumption, determined by the consumption of durables and gradually financed by rising exports at the expense of traditional domestic consumption, as well as based on capital imports. The new phase of expansion, which was then in preparation, would thus abandon the previous accepted pattern of economic growth, where overall expansion was achieved, by the combination of heavy industrialization and light manufacturing industries expansion.

Although the wages were currently presented in official views as the main cause of inflationary pressure, the most visible causes for inflation in the period remained to be the Treasury Cash deficits, connected with the excessive expansion of the loanable funds, being both in close association with capital excessive outflow. The deficits in the Cash of the National Treasury were thus expressing a more deep set of structural imbalances. The excessive invest-

ments and public expenditures, as well as the exchange imbalances, were associated with international uncontrollable conditions, and were for this used as an objective source of income reallocations domestically (9). The fact that a considerable part of the Public funds was being used to finance the real estate market was paradoxically not seen as a major source of inefficiency in the financing system. An adequate economic policy here should certainly curtail credit within reasonable margins, in order to avoid an additional downward cumulative movement, as then succeeded. Since consumers also buy goods in a basis of credit, a flexible reduction of credit would act both on the producer as well as on the consumer sides. When curtailing the demand through credit squeeze, the Government oriented the weight of the crisis to the basic consumption and to the traditional producers of consumption goods, providing -through this mechanism- a transference of income from one group of manufacturing branches to another, and from one group of consumers (workers) to another (durables' consumers). These inducements were also implemented through the reduction of rediscounts and loans by Banco do Brasil, which applied the prescribed selective policies as the main government commercial bank.

When ordering the Treasury's Cash deficit, the Government also marketed indexed bonds to purchasers, which contributed in the short term to raise the interest rates and, in the long term, was a clearly inflationary measure. A taxation reform was introduced to increase the Public revenues and thus contributed to balance the Government budget. The situation of the National Overall Account remained, however, deteriorating. The Government cuts in the non-investment Public budget (operational) was in order to reduce the excess demand in its Public component. This excess demand was considered to be in large part maintained through the mechanism of indirect subsidies, representing this mechanism in fact some sort of Public spending, under different façades. The reduction of the current Public costs, especially through a rationalisation of the Government administrative routines, contributed also to expand unemployment and improve mobility in the labour market. This phenomenon contributed to feed the future expansion in more favourable conditions to the corporate sector.

The restriction of domestic credit was partially countered by the Instruction No. 289, which was designed to ease the achievement of resources abroad by corporations, especially those externally based. This demand for external flows in support of the corporations, at free rates terms, was in fact an additional source of exchange imbalances in the near-coming years. These uncontrolled costs were thus later making pressure in the capital account. Due to the rising costs in exchange values that Instruction Nr. 289 was implicated, it reduced the effects of the antiinflationary policy of Castelo Branco Administration, when considered in the middle run.

The financial intermediation activities grew rapidly through specialized Houses, with the elimination of the law which restricted the ceilings

of the interest rates. This was result of the expectation of the Public Authorities that an induced expansion of the financial sector would make the corporations stronger in their savings capacity and reduced the degree of their indebtedness.

Needless to say, the control of credit was -in practical terms- countered by a series of measures of selective character, as we mentioned before, measures which favoured specific branches or economic groups. These facilities were gradually developed to foster the ulterior coming expansion, upward movement based on these branches and corporations which had have granted an overall support. The producers of traditional products, as for example textiles and footwear, remained under strict policies of tight money. At the same time, as we explained before, the producers of durables were financed to expand. Until the second half of 1965, the Public authorities extended facilities to the producers of automobiles, which output was then running 40 per cent under the branch effective capacity. This was, however, a period of tight money. The metallurgical and mechanical-producing industries were in part reactivated by the expansion of credit also granted to purchasers of automobiles. This credit was extended by the Government through the structure of the Public savings banks. The Federal authorities justified this decision by the fact that the branches to which credit was granted in exception were the most dynamic and thus necessary to protect in the process of modernisation. They would by this action have guaranteed a normal expansion. In coordination with these new credit facilities, the Government activated some of their capital expenditures, especially in the State-controlled corporations. These measures were implemented until the middle of 1967, and prepared the expansion of the next year, while in fact the decision for this new course was still produced during Branco Administration, in 1966.

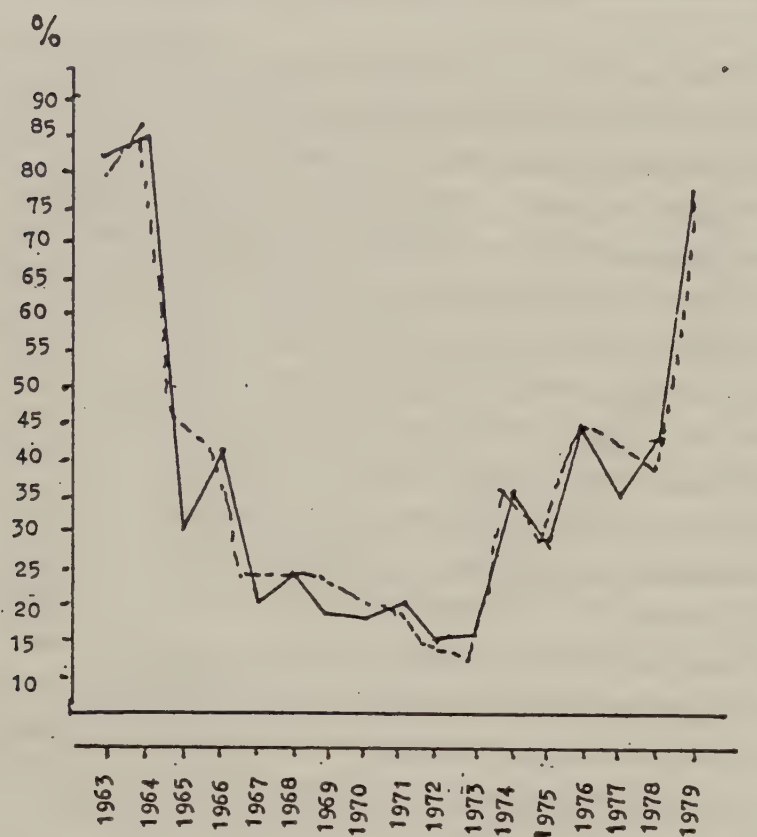
7.2.3. Exchange Imbalances and Capital Flows.

The exchange rate policy was changed in order to stimulate exports and reduce imports. The Government authorities wanted to use a liberalisation of the exchange rate in order to gradually introduce changes in the structure of the demand, since food imports, capital goods and inputs were requiring more exchange reserves than the export sector could produce. The first available alternative was to orient imports according to the needs of the officially defined more dynamic sectors. Thus, the requirements in capital and inputs of these sectors had to be fulfilled with priority. This was the spirit of the new legislation, as the case of the previously mentioned Instruction No. 289. Of course, the smaller corporations were clearly in a situation of having deficient contacts abroad, and by this reason they difficultly managed to received some equipment and financing from abroad, under the protective mechanism of Instruction Nr. 289. The availability and use of external resources were thus supposedly introduced in the game in a free way, while in fact representing a mechanism of oligopolization and structural changes,

Figure 7.1 Per Cent Variation :

Wholesale Prices - All Commodities

Cost-of-Living- Rio de Janeiro



Source: F.G.V.

through strong competitiveness. It is important to understand that this measure for free trade capital inflows played a certain role in the future deterioration of the Brazilian foreign debt position, since these resources gathered abroad were not controlled by the domestic exchange and monetary authorities. It is also noteworthy to observe that this measure coincided with the worsening of the capital account, due to a considerable outflow and rising domestic indebtedness this policy performed, in association with the other component of liberalisation, i.e., devaluations. These free exchange trades by borrowing abroad would necessarily have to be reflected on the future position of the funds of the National Treasury, and also should have to be expressed as demands for new credits, new issues of money, new devaluations, etc, in a endless chain of imbalances. In this sense, it should be pointed out here a Public option already in this period for moving the economic forces through postponements of decisions and excess in the sectoral protective measures. This option in nature was not different from the previous policies which were existing before 1964. This feature thus deny the hypothesis of a supposed radical change in the way of facing the process of economic growth, which is currently claimed by the post-1964 Administrations.

It must be observed that Brazil was remaining under trade and balance-of-payments restrictions, and thus this could scarcely admit radical changes in the relations between Brazil and the rest of the world. In this case, the secondary issue of the Public policy- trade surplus- also acquire importance. It was legitimate the effort of the Public authorities to expand exports and reduce imports, as well as the attempt to gain some balance in the capital accounts. However, these measures were promoted with a bias which attributed an excessive role to the set of economic policies in itself, reducing thus the developmental process to a simply normative question. The first shortcome visible was that the export expansion should have to be limited by the effective interests of the corporate sector. Within this sector, the power of the corporations which the Government desired to promote had been growing much during the squeeze. Paradoxically, these corporations were the less positive to the long-run claims of the Government in economic policies.

When in reference the Brazilian foreign terms-of-trade, the Public authorities had been facing since the mid 1950s a situation which showed an increasing deterioration in the value of the Brazilian exports. This required then a tremendous effort to make the exports grow at a rate which was enough large to overcome the prospected increases in imports and the deterioration trend existing in the export prices. The weak point in this Brazilian position was the fact that the Public authorities introduced liberalisation as a weapon to enforce savings and -as far as possible- eliminate the excessive low relative prices of imported goods (including capital goods) in the domestic market. But in order to feed the next expansive business movement, these authorities were constrained to except from the squeeze associated with liberalization exactly the same corporations which demanded more exchanges, This was thus a vicious circle.

The excessive investments could not be cut down exclusively by the Government action. The Government could calm down the productive investments, but speculative capital appliance would have to expand in order to compensate eventual resources allocators and thus this should certainly correspond to a process of corporative concentration. On the other hand, the potential rise of the share of speculative positions in the capital market should correspond also to an inflationary pressure. It was difficult to avoid these features in the middle run. In order to reduce a part of the pressure to speculative moves in the capital market, the Government should have to attempt to reduce the capital outflow through liberalization measures, i.e., the Public authorities should have to find a degree of liberalization which would stimulate inflows of capital in an amount enough to counter the increasing capital outflow. Since some corporations were allowed to trade abroad resources in exchange, this indebtedness

had to be vouched by the Brazilian government. This, at the end of the accounts, was a Brazilian debt. As a result, this policy was paving the way toward an uncontrolled indebtedness.

A more correct analysis would certainly point the fact that the business squeeze had not necessarily to be so deep as it was; or even, so continuous as to squeeze the domestic market. Other branches than durables should have to achieve periodic credit facilities, in order to avoid the losses which become characteristic of the period. This is confirmed by the fact that the Government was gradually feeling pressed by the corporate sector, which suffered from the extensive unused capacity in the economy. The Government, of course, was more sensitive to the claims of the big corporations, which were generally connected with the rationales of the Public authorities toward a development of a sound market. Especially the new ventures were object of concern by the Public authorities.

Attempts were thus introduced in order to strongly promote exports, but, of course, these measures required some experiment and maturation, being the more favourable results aquired in a period after three-to-five years. At short term, the international unfavourable juncture cut some of the domestic efforts to expand the supply to the rest of the world, and the positive results were more visible in the coming period, during the Administration of Costa e Silva (1967-69). The expansion of the exports revealed to be a result of diversified supply of commodities. Thus, it must include as much industrialised items as possible. For these purposes, firstly, the agricultural development had to be in some exten produced or re-aligned and secondly, the traditional industries were in need to be activated, with basis in their unused capacity. By this mutual movement, a new set of exportable items were more in condition to achieve a rapid expansion. Paradoxically, this set of exportables was comprising more products of the traditional industries, which constituted the basis of the import-substitution policies and were expanding under the policies of the import-substitutive phase.

7.3. An Interpretation.

7.3.1. Hypotheses.

The assumptions of the Public authorities in the period under reference should adequately be resumed as follows:

- (1) that an appropriate and flexible monetary policy, employed in coordination with fiscal and other policies, should be the method used to achieve the purposes of the reactivation of growth;
- (2) that economic stability should be promoted by timely flexibility toward easy credit to dynamic corporations and simultaneously credit restrictions should be implemented to less dynamic enterprises or branches;

(3) that higher interest rates should promote a more free market situation, and possibly cancel the excess unemployment produced by the business squeeze.

The above related hypotheses are implicitly expressed in several official documents of the period, and we found adequate to express them in a clear form (10). It is observable that the basic orientation of the Government authorities was centered exclusively on the industrialization forces, which constituted a shortcoming. The former governments supported the consumers of imports, financing the purchase abroad of capital goods and also agricultural commodities, in order to expand industrialization and reduce the economic importance of the agricultural sector. This new Administration also ignored the decreasing performance of the agricultural sector, as well as the periodic agricultural shortages which, -despite characterized as drought and freeze phenomena-, were stimulating imports.

Aside with denying the retarded character of the Brazilian agricultural development, which presents clearly stagnant productivities, the Government authorities exaggerated the monetary character of the manufacturing sector imbalances, certainly under the impact of the more-than- expected expansion in the previous period. It seems thus to be that official miopia refused to see an "agricultural problem" in Brazil and this was determined by political reasons. By doing little or nothing to face the enormous de-capitalization of the agriculture, the squeeze pattern which was previously tailored to this sector followed up in its functioning, in the situation of post-1964 policies.

When in focus the monetary policies, there were numerous reasons for the shortcomings they showed in the form they were implemented by the Public authorities in the period. These shortcomings can be considered as if they fell into the exclusive condition of two categories. Firstly, there were shortcomings for which the Government authorities had little or none responsibility at all. Secondly, there were those for which the authorities must bear a major responsibility. In the first case, we may list shortcomings originated in exogenous factors and acting under uncontrollable circumstances. This was the case of the slowdown of the Region's position in the international trade, eventually aggravated by episodes as the Lomé Covenant or the Suez crisis, etc. In this case, the Government authorities were not in a position of countering these forces, exclusively by the action of the Brazilian State. In the second case, we may list the adverse forces which Government was in a position to positively influence them and- due to omission and/or erroneous decision(s)- the Public authorities failed in setting the situation under control. These second type of shortcomings must be synthetically appre-

ciated.

7.3.2. Partial Conclusion.

Shortcomings over which the Government authorities had had a major responsibility can be listed as follows:

(a) the use of inflationary mechanism as antiinflationary weapon- The adoption, by the Government authorities, of indexed mechanism in order to protect assets, including Government assets, presented a clear long-run inflationary effect, while this allowed the authorities in the middle-run to exhibit a considerable relative decrease in the expansion of the Wholesale Prices Level and of the Cost-of-Living Index in some critical areas. The reduction achieved in these indexes was in fact obtained through excess curtailment of the credit, as well as the establishment of excess unused capacity in the domestic economy.

(b) failure of the fiscal policy- Aside with the traditional incapacity of the Brazilian Public authorities to control Public deficit or, in other words, to generate budget surpluses or fiscal revenues, it is possible to affirm that the rising (or liberalisation) of the interest rates made them fluctuate in a broader range. These fluctuations in the value of net capital, as well as the branches shifting and spread unemployment certainly countered the positive effects of the monetary policy.

The introduction of Government-indexed bonds in the market was in agreement with the rises in the interest rates and also with the adjusting inflationary mechanism, as well as extended indebtedness abroad. Simultaneously, the existence of medium and long-term indexed bonds adjustments contributed to long-run inflationary expectation and speculative placement of portfolio values. In this frame, fiscal policy should have to be more aggressive in order to promote greater concern on productive investments and in effective market expansion. Thus, the excessive restrictness of the monetary policy was operating with a relatively shy fiscal policy, which contributed decisively to the extension of the recession, to income concentration and overall indebtedness.

A general feeling was growing up in the business circles that, since 1964, the pursued monetary policies had brought interest rates to levels higher than they should or need to be, while simultaneously feeding recession. Most of the analysts believed that monetary policy had been unduly restrictive, not as flexible as desired, and had not performed as well as it might have done, when promoting the objectives of the reactivation of growth (11). Thus, Government policies were considered as feeding recession, while primarily intending to perform its main duty of combating structural inflation and structural distortions. In other words, while the changes in political power

created the conditions under which monetary policy could do a better job, and while some improvement had been made, the full potential of monetary and fiscal policies to promote economic growth had not been realized.

Let us provide an exercise which can give us some insight in "what it was" and "what it should have been", in relation to the period 1965-1968, on the following assumptions:

(1) that the interference of other factors or forces can be ignored or considered as null;

(2) that the trend of the period 1958-1964 corresponds to the orientation of the economic policies prevailing and applied in the period 1957-1963. Thus, if we project the values obtained in the period 1958-1964 to the period 1965-1968, they may give us an indication of "what it should have been", if the policies had not changed.

It is important to have in mind that this exercise is extremely unfavourable to import-substitution type of mixes, since the conditions of trade in the period 1958-1962 are much more worse than those of the period 1964-1968.

Let us produce the exercise with the following variables:

- (a) Cost-of-Living;
- (b) Wholesale Prices;
- (c) Agricultural Output;
- (d) Industrial Output;

(3) that the effective values of the above mentioned variables which occurred in the economy in the period 1965-1968 were result of the policy mix applied by the Government authorities in the period 1964-1967.

Under these simplifying assumptions, let us now call:

- (1) "what it should have been".
- (2) "what it was".

then we have:

Cost-of-Living (%)			Wholesale Prices (%)	
Year	(1)	(2)	(1)	(2)
1965	103.5	45.4	93.0	31.4
1966	113.9	41.1	102.1	14.2
1967	124.2	24.5	111.1	21.2
1968	134.6	24.0	120.2	24.8

Agricultural Output			Industrial Output	
Year	(1)	(2)	(1)	(2)
1965	97.1	100.0	120.2	100.0
1966	100.6	96.8	126.4	111.7
1967	104.1	102.3	132.6	115.0
1968	107.8	103.8	138.8	130.2

If we accept these indications, it seems to be that additional growth would be available at inflationary costs. This would confirm the non-exhaustability of the import-substitution mechanism (A. Villela). This trend was thus ousted by the change in economic policies which the new government implemented. This, in this case, seems to confirm also our previous hypothesis that Government simply desactivated the economy, reducing thus the inflation rates at expense of unused capacity.

In the agricultural policies, the Public authorities followed the traditional government preference to support farm prices rather than farm income. This policy was not contributing to capital formation in the agricultural sector. Inflation, costs of financing and trade companies which acted as middlemen to the sector were customarily consuming the larger slice of profits, letting thus to the farm development only the resource of labour squeezes. It was necessary then to develop already some kind of agricultural investments programmes, which could gradually bring with effective support toward capitalization of the farms. This issue, in fact, was not committed.

While only a government with clear political support on the ruling groups of the society could implement in some extent adequate fiscal policies, the ties between this government and the above mentioned groups should work in the sense of avoiding a more audacious commitment in fiscal reform. This half-hearted policy attempted to meet the difficulties of Public debt management, when monetary policies were in fact feeding recession. Paradoxically, the basic solution lied close at hand. A more sharp basic tax structure would bring revenues close to an elimination of the Public budget gap. If revenues would thus be raised, adjusted by the extension in need, the government would both strengthen its economic position and avoid extensively additional domestic concentration of disposable income. Simultaneously, numerous savings could be made by unpreferential management of the squeeze, in order to implement productive investments. It was thus inconsequent to raise the cost of capital and then making the Public effort pay for this.

Since it is extremely difficult to attain growth with stability, especially in developing economies, the Government's requirements for balanced economic freedom, economic efficiency and economic security should have to be promoted at expense of growth. This detrimental development to the objectives of the expansive forces in the economy resulted from the partisan view of the Public authorities, which too much emphasized the real economic rigidities and considered recession as a blessing.

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REFERENCES

- (1) -Keynes, J.M.- "General Theory of Employment, Interest and Money", p. 316.
- (2) - A comprehensive view of the inducement of the downward forces by the Public policies is found in Alves, M.-"A Crise Economica Atual"-, Sao Paulo, 1967.
- (3) -It is not clear if the claims of the Public authorities on the near achievement of a elimination of the the Public budget deficit were genuinely demagogic or if they were expressed due to naive views characteristic of a military power. In this case, the leading military in power were newcomers in Politics.
- (4) -This expression was in most palatable in the official circles, and it can be found in several documents and interviews produced in the period by the main personalities of the Administration.
- (5) - Mention should be made that the adjusting character of additional inflation was publicly recognized and alluded by Government authorities in several opportunities.
- (6) - Among the critics of the "shock treatment" were Professor Delfim Netto and General Costa e Silva, respectively Finance Minister and President in the following Administration.
- (7) - The ideological character of this Administration was also pointed out in the work of Silva Pereira, -"O Projeto Jurídico de 31 de Março ", Sao Paulo, 1967.
- (8) - See "A Economia Brasileira", Sao Paulo, No. 1 a 3, 1980, 1981.
- (9) - This has been recognized even by Government officers, as E. Galveas and C.G. Langoni.
- (10) - These ideas are easily found in the documents of SUMOC (formerly organ and presently monetary council), National Monetary Council, Banco do Brasil and Federal Finance Ministry reports.
- (11) - See reference (2) and also interviews and papers of Conceição Tavares, M.; Furtado, C.; Serra, J.; and Martins, C..

8. POLICIES FOR A NEW EXPANSION.

"A year ago few people believed 1967 could present such satisfactory results in relation to the economy. And as for the job market, the outlook was even grimmer, with demand for labor falling continuously since mid-1966."

In "Conjuntura Economica", (1).

8.1. Introduction

As we emphasized previously, the years before 1962, to some extent 1963 and 1967, were unfavourable to the expansion of international trade of LACs. While the industrial goods rose their price in a sustained pace, as an effect of the industrial countries full recovery after the World War II, the primary commodities dropped their own, as an effect in this case of excess competition and output in developing countries. Simultaneously, the purchasing power of the developing countries was decreasing as a result of unfavourable international trade and this movement had to be compensated by capital inflows. Due also to a relatively reduced expansion-pace in Europe in the early sixties, the world trade rate became sluggish, reflecting in swings especially strong in LACs. With regard to Brazil, domestic difficulties also contributed to accelerate the rate of inflation and fostering a cumulative downward movement, which persisted up to 1967.

The Brazilian difficulties were expressed both as economic developments and institutional failures; as an effect of change in the political régime, changes were promoted in both spheres: (1) political changes: centralization of the decision level in the country, elimination of free interplay in the labour market, re-orientation of the growth policies, etc. (2) economic changes: abandonment of import-substitutive type of industrialization and mixes; and an adoption of export-expansion type of industrialization and mixes.

8.2. Overall Economic Policies

During the Castelo Branco Administration, a major emphasis was put on recessive policies, which were supposed to produce an adequate "purge" in the Brazilian market and preparing for more sound business conditions. In fact, this squeeze seems to have been excessive, since it was more orientated to reduce traditional output, without removing permanent factors which caused structural maladjustments. Notwithstanding this aspect, the "warming down" of the economy, by expanding the unused capacity, reduced the real costs of labour and expanded the margins of profits, preparing thus a new spurt through business re-orientation (2).

To some extent as an effect of the excessive squeeze, the Castelo Branco Administration was substituted by a new Administration, under the leadership of Marshall Costa e Silva (1967--1969). During this Administration, as a result of the political instability produced by the change of régime, the country

was scene of a new coup-d'état in Dec. 1968, which gradually evolved into a military junta and the indication of a new general to the position of President, in 1969. We shall appreciate together the period 1967—1969, once this period shows a persistent economic... policy, despite the eventual political changes. The explanation seems to be the effort of the new authorities to remove any kind of opposition to their programmes, an effort which produced additional centralization, repressive measures etc. These political changes were accompanied by the adoption of a basic economic programme and in fact they corresponded also to measures to enforce this programme.

Thus the Costa e Silva Administration can be visualized as a period where recessive policies were abandoned, expansive measures were implemented with basis in the extensive unused capacity, exports were gradually promoted and the labour market was followed under strict intervention. Simultaneously, strong liberalization policies were adopted, the most important of these mechanisms were the so-called "mini-devaluations". The purpose of the "mini-devaluation" was the same as of a "maxi-devaluation" i.e., to reduce the import capacity and expand exports. But since this mechanism was adopted under conditions of a free capital flow situation, devaluations should have to contribute to extensive and deep Brazilian indebtedness abroad, at an unpreceding scale.

8.2.1. Investment Policy

The main difference between Castelo Branco policies and Costa e Silva orientation seems to be that Costa e Silva supported industrialization, while his antecessor was restrictive to State promotion of industrialization (3). Despite this difference, Costa e Silva Administration was not expanding much public investments, and the explanation is: (a) firstly, there was a tremendous unused capacity accumulated in the squeeze years, and the full use of this capacity would equally require some years of expansion; (b) secondly, Costa e Silva also desired to reduce the persistent force of the State reallocative policies in the market. This intention to act through a more sound market mechanism was a common trace in post-1964 Administrations, and may be interpreted as a source of confusion and inferior maximisation, which was current in the period. (4)

Thus, Costa e Silva Administration delauched the preparation of several new expansive projects, while they in practical terms relied on the reactivation of the existent capacity, through adequate financing of business activities and durables consumers' credit.

The adoption of more expansive activities influenced to some extent the investment expenditures. But this was a gradual phenomenon. Since the previous Administration spended resources in trying to activate agriculture and traditional export activities, these branches expanded more in the subsequent period than the manufacturing activities, which had become largely depressed. Oil and construction expanded first, as a response of the automobile output reactivation and the creation of the "housing-system". The "housing-system" was an idea skissed in Kubistchekian days, but implemented by Castelo Branco Administration (5)

It consisted in the creation of a financial system, useful to finance housing expansion to the lower income strata. The centre of the financial system was a bank, national housing bank, which used compulsory savings of the workers to raise funds to construction and real estate market. The houses financed in this way would then be purchased by workers, with a long period of amortization. In practice, this system was collecting funds from unskilled labour to finance the expansion of the real estate market. Due to indexation, squeezed wages could never pay back such investments, and the bank financed the expansion of middle class housing or luxury construction, whose purchasers were in conditions of paying back the loans. Since this additional demand for housing was favourable to reactivate civil construction, it also reflected into new demand for labour.

As we mentioned before, the post-1964 administrations were basically hostile to inflationary mechanisms, which were interpreted as optional tools, and not imposed by the nature and devices of a developing economy. In this sense, the expansion of National Treasury securities should have to play an important role as an antiinflationary weapon (6). Aside the expansion of Treasury bills, LTNs, was created ORTNs, indexed bills, clearly inflationary in nature. Gradually, all the mechanism of savings and financial assets was protected by indexation, which corresponded in fact to the acceptance of inflation as a structural mechanism of a developing economy (7). The middle-run effect of this policy was the expansion of savings, with consequent expansion of investments. Since this indirect mechanism could not assure the productive character of the investment, considerable resources were granted to the expansion of the real estate market, as well as used in speculative activities not directly connected to the effective expansion.

3.2.2. Factors' Return

While the private rates of interest were allowed to move free, and Government financed low discount rates to make capital cheaper to investors, the wages rates remained under squeeze during the period, with strong deterioration of the real level of the wages. These changes in return to the economic factors were aggravating the difficult position of the traditional manufacturing sector, which was dependent on the level of wages to assure its expansion. Aside with trade liberalization, this policy contributed to reduce the domestic market available to traditional expansion, as well as to feed income concentration of this Brazilian export-orientated phase of industrialization (8).

What were the advantageous elements of these changes in factors' return? The advantageous elements can be described as: (a) expansion of the margin of profits; (b) emphasis on durables expansion, and consequently the achievement of more rapid rates of growth; (c) income concentration; (d) reduced domestic demand of labour-intensive items, which were more advantageous to Brazilian exports; (e) reduced imports of traditional-orientated inputs.

The expansion of the profits margin was the first obvious result of post-1964 political orientation. This expanded margin of profits was produced

only by the reduction of the real wages rates, with consequent reduction in real productive costs. This was a logic measure of post-1964 policy, once it explained wages as the main source of costs and wage raises as the main source of inflation. In fact, even in the period before 1964, it is difficult to say they were too much high. We will shortly explain why. As a developing economy, wage differentials have historically been large in Brazil. Salaries, which include much of property gains, are traditionally high, when compared with wages, properly said. Thus, the final mix show an average wage rate per capita which is much higher than in fact the component paid to the workers. The reduction of wage pressure was produced only in the worker component of the wages bill. Therefore, income differentials and wage differentials grew even stronger as a result of this restrictive wage policy (9).

The added profit due to wage decreases can be visualized as a compensation to traditional manufacturing sector by the reduced market it experimented. This policy, thus, can have represented a general political factor to unify the the interest of property owners, by opposing them to workers. Moreover, the gradual expanding facilities to exports and the maintained regressive character of taxes structure must have contributed to a step-by- step relaxation of the business squeeze that this traditional sector was experimenting.

The emphasis on the expansion of durables was also a logical result of an option to squeeze wages. Once the country was traditionally presenting a low level of disposable income, and despite the sustained economic growth, the post-1964 administrations emphasized the need for income concentration, in order to establish a market sector of demanders of more modern output. It is clear that this particular market of high consumption should have to be established by squeezing the workers, due to the fact that the income could not grow faster all of a sudden (10). This fact was more obvious since the workers have played, since the acceleration of the industrialization by import-substitutive mechanisms, a position of a potential market, with their incomes clearly over the average national income per capita (11). When Costa e Silva administration followed up the previous policy of wage squeeze, it becomes clear that this policy would then be a prevailing element in the mixes of the export-orientated industrialization adopted in 1964.

The establishment of a favoured market of high consumers within the Brazilian economy was thus developed by a political decision (12). The conditions were existing beforehand, the competition between traditional consumption and durables expansion was existing since the middle of the fifties. The overall economic expansion of the import-substitutive type, promoted then mainly under Vargas and Kubistchek administrations, relied largely on real wages improvement, although a trend was existing towards gradual income concentration. This resulted from the strong Public involvement in heavy industry, which consequently required the expansion of consumers credit, due to the general low level of income existing in the country.

The formation of a market within the market, with a high pattern of

of income to some privileged strata, allowed the post-1964 administrations to develop a dual market situation clearly into the urban sector (13). The use of the reserves in labour which become constituted into this dual market situation was insufficient, since the Public authorities refused to accept this characteristic in their planning and programmes. The modernisation was thus focused on the high-income consumers, being possible to admit the existence of different consumption functions in the policy and the options of the Government authorities (14). Thus, labour-squeezing features could be implemented in the industrialization process, at the side of capital-wideening type of industrial growth, achieving as a result a more balanced economic growth.

This process of income concentration led thus to additional income concentration (15). We could observe that the labour policy of Costa e Silva administration was even harder than that of Castelo Branco, relying the Silva administration in mostly repressive activities (16). On the other hand, the re-taking of the expansionistic policies contributed to increasing demand for labour, phenomenon which in part stimulated the competition among workers. The interplay of these factors contributed also to larger wage differentials, both inter- and intra- branches. The enlargement of wages differentials was thus in association with the process of income concentration, and certainly it was accelerated by the Government policies which eliminated the free labour market. In this case, the wages internal gap was not produced by rapid technological change and/or structural changes only, but was strongly accelerated by institutional mechanisms.

As a result of these policies, the level of real disposable income of workers become depressed, and the structural maladjustments were temporarily readjusted by the reduction of the domestic market and by the depressed consumption function of consumers of traditional output. The redistribution of these effects of the structural maladjustments were produced mainly by the so-called "corrective inflation" mechanism and elimination of the free labour market.

We see, therefore, that the reduction of the domestic market of traditional output contributed to expand the supply of these goods to exports. Through the trade liberalisation and periodic "mini-devaluations" this Administration reduced both the domestic market for domestic traditional industries, as well as the exchange value of their profits, compelling those industries to export. The enforcement of a dual situation of the urban market was also an additional source of expansion.

The extensive unemployment and low wage rates contributed to the creation of small enterprises, with low capital resources, which could operate mainly under the characteristics of labour squeezing. Simultaneously, the excess of unskilled manpower could be absorbed seasonally into urban services, reducing their structural costs (17).

8.2.3. Prices

Since the Government Authorities in the period 1966--1970 considered officially the inflation rate in the order of a constant 15 per cent per year for wage readjustments, the fact that the prices varied over that figure can not be explained in terms of nominal readjustments of wages. This should be an argument enough strong to deny the inflationary causal character of wage workers in the period (18). Despite this, the Public Authorities followed the policy of wage squeeze, since it constituted a supposed additional favourable factor to competition abroad.

The already depressed position of the Brazilian purchasing power abroad, which worsened with the strong capital outflows of the period 1962--1967, was still made worse by the policy of devaluations. These unfavourable results imbalanced the National Treasury accounts and effected as the pressure to expand the money supply, being this time the real cause for consumption squeezes. With the expansion of the financing of agricultural activities, these Public accounts for financing exerted pressure on the Public spendings, and thus forced the urban economy liquidity.

Thus, in order to avoid additional pressures on prices, the Government Authorities relied more on the use of existent capacity to expand the economy and achieved good expansive rates both in 1968 and 1969.

The official rates of wholesales prices increase in the period 1966--1970 lies in figures a slice over 20 per cent per year, which is clearly fictitious. The criterium of measuring the price changes was manipulated in order to produce more favourable results to post-1964 policies (19). Despite this propagandistic move, the inflation rates were strongly inferior in the period of Castelo Branco and Costa e Silva Administrations, a fact which may be accounted for to the strong reducement of the productive capacity in use (20).

8.3. Monetary Policies

If we divide the balance of the means of payment (in Dec., 31) by the balance of the circulating paper-money in the period, we obtain the following multiplication coefficient, as a major indicator of the monetary behaviour:

1964	3.76	1968	4.30
1965	4.39	1969	4.56
1966	3.82	1970	4.70
1967	4.32		

When we compare the figure of 1970 with, as an example, the figure of 1964, we see that the Government was no longer restricting the money supply, and the banks in 1970 (or 1969) were performing their function of bank-money creators. This fact is important in the face of devaluations and wage squeezes, once it shows clearly the corrective character of the existing inflation (in fact, the inflation rate was in the period over the expansion of money supply, being thus some 30 to 35 per cent in average per year).

8.3.1. Rediscount Policy

In order to expand the output, the Government in the period 1967--1970 was gradually adopting a policy of expanded credit, in order that 1969 and 1970 shows figures with clearly credit favourable monetary behaviour. This effect was produced both through (a) a relative free course of the interest rates and (b) the Public maintenance of low discount rates, in order to induce low capital costs and more rapid money turnover. Thus, the official bank system followed up the pre-1964 policy of implementing low costs for capital, and this policy would necessarily reflect in economic expansion, cheaper capital costs, increased imports and inflation.

In short term effects, the fact that the Government allowed a free flotation of interest rates was important to assure efficiency in monetary policy and improve the market capacity to reallocations. The adoption of Public low discount rates contributed to additional flexibility of interest rates, once this policy reduced the competition of Government securities with Private securities. The other side of this policy was that adequate behaviour of the Government Authorities increased the interest of the public toward Government securities, especially indexed securities. Thus, aside a low discount policy, the Public Authorities had to promote additional measures to make the Private papers more attractive.

Interest rates in Brazil, in the period in review, tended to rise more than those in the developed countries. This was also coincident with the historical trend of Brazilian interest rates to rise, while they have artificially been maintained relatively lower in the period of pre-1964 than they would otherwise have behaved. Thus, capital outflows contributed to raise the domestic interest rates, while capital inflows may have had a reverse effect in the short run. This behaviour of the interest rates seems to be a result of the fact that the country is a strong capital importer, with sustained periods of real unfavourable balance of trade.

In the second place, although the Brazilian interest rates are customarily upward oriented, due to the strong position that the Government banking system occupies in the financial and credit markets, the Private price of capital is sensitive to Government manipulations in the value of the Public-issued securities and discount rates. This characteristic enlarges the flexibility of the domestic interest rates and puts the Government in a position as arbiter of the credit and financial markets. Thus, while the financial market is characterized as relatively low in efficiency, the credit market reflects the higher efficiency of the Public policies for capital formation.

With the adoption of the indexed mechanisms in the financial Government assets, the Government made stronger its position as arbiter. But it also contributed to long-run inflation and further dependence on capital inflows, since the unfavourable trade balance should require resources from abroad to expand the total domestic capacity of payment abroad.

The rediscount rates can thus be interpreted as a mechanism of growing indebtedness of the Government abroad, once it should have to achieve, abroad, the resources it was selling cheaper at home in the credit and financial markets.

8.3.2. Evolution of Reserves and Monetary Expansion

Since the Governments in post-1964 years made an option to increased indebtedness abroad, the position of the Brazilian reserves in foreign currency became a less decisive indicator of the exchange policy quality. As we know, the real position in terms of constant dollars of the Brazilian purchasing power abroad was highly depending on capital inflows, and this trend became reinforced by the export-oriented industrialization policies. (21)

The completely unfavourable balance of trade since 1967, onwards (with the sole exception of 1969) eliminated practically the possibility of achieving some amount of foreign reserves as a result of foreign trade. This amount should have to be obtained through capital inflows and foreign loans. Although the disastrous evolution of the foreign trade position seems to be paradoxical to an export-oriented type of industrialization, this was in fact the result of a policy which relied in foreign trade when the domestic efficiency in foreign trade was historically decreasing. Once, the domestic economy could not be transformed by Government decrees, the added dependence on abroad should have to be "traded against the future" (22).

The successive "mini-devaluations" after 1967 increased the inflow of capital, but the cost was certainly made excessive. The Public Authorities adopted then the policy of constituting reserves with a part of foreign currencies borrowed abroad, in order to keep some degree of flexibility into foreign trade. This policy implied, on the other hand, the creation of a illusory smooth in trade position, since the bottleneck was directly assumed and payed by the Government, whichever being the trade position throughout the year (23).

The use of foreign borrowed resources - as a permanent feature of the domestic scarcity in exchange - made, paradoxically, disappear this domestic scarcity of exchange values. In every quarter of the year the foreign trade was moved with a large margin of resources, which made less relevant the deficit in the end of the year. Under these assumptions, the existence of exchange accounts in the Overall National Accounts became a simply conservative game of the Treasury Authorities (24). Thus, the existence of an exchange budget became fully irrelevant. In dealing with this problem, the first conclusion to draw is that the export-oriented mix in fact created a structural problem in the foreign trade. The capital inflows were presenting thus as a potential inflationary focus, conditions which would appear, since some bottlenecks should be produced abroad and reduce these inflows. The following argument may help to make this clear; under conditions of balanced growth, excess inflows or outflows generate the need for a new position of equilibrium, through changes in the exchange rate, money issue, etc. In a sustained position of disequilibrium, as we mentioned above, the exchange accounts act as an inflationary source:

each inflow must correspond to a money issue, since a subsequent devaluation must generate favourable conditions for newer inflows. Notwithstanding this difficult position of the exchange accounts, several monetary weapons remained in the hands of the Government Authorities. In the period of reference, these Authorities were somewhat cautious with abandoning inflation-curbing policies. Later this change was produced, and the full expansive policies showed the same type of structural maladjustments we have found in the pre-1964 period, especially in the early sixties.

As it is well known, "structural maladjustments" is a term which corresponds to "unproportional" disequilibrium related to growth processes. The term is characteristic for the development of specific and unexpected inelasticities, within (intra) branches and, or inter-branches. These inelasticities were not expected to appear in face of the going changes of relative demand. A position of equilibrium at an origin point of a growth cycle, should correspond to a final position of equilibrium in the end of it, since all branches were allowed the adequate investments rates and also stimulated to adjust through the market mechanisms. Consequently, a sustained position of disequilibrium, requiring more and more resources to balance the economy is supposed to be connected with some "structural" feature of this economy, generally of institutional origin (Furtado; Corbisier), which "promotes" and "tipifies" the imbalances of demand and supply and require thus to additional growth.

8.3.3. Public Finance Policies

The policy adopted in post-1964 period, was of producing a balanced result of the Cash of the National Treasury, while the other accounts which reflected the real economic position of the country were avoided to converge explicitly in an Overall National Account of balance. The position of the Cash of the National Treasury was, thus, balanced "a priori". As we see, a full balance is obtained. Unfortunately, this is a too much restricted view of what was going on, once all the Administrations in this period used, as we mentioned before, a policy of strong indebtedness abroad. The Costa e Silva administration was in fact the same administration which introduced devaluations as a systematic feature of liberalization. This decision should have to be produced sooner or later, within the logic of export expansion under unfavourable trade.

Once, the Castelo Branco Government avoided to produce a fiscal reform, limiting its action to expand indirect taxes and gather resources to balance the Cash turnover of the National Treasury, it should be expectable that Costa e Silva Administration, after being more committed to industrialization, would implement to some extent a fiscal reform to gather the funds to development. This Administration, however, was as conservative as the anterior, when referring to a fiscal reform.

It is true that the conditions for Costa e Silva Administration were less favourable than those found by Castelo Branco. The ruling forces were less disposed to sacrifices than the previous Administration; the euphoria of

eliminating the presence of the labour unions was then calmed, and the business squeeze was a painful experience connected with the ideas of "changes" and "reforms". It seems to be that, since Castelo Branco avoided a radical fiscal change, the opportunity to this reform was passed away definitively in the subsequent Administrations.

Thus, the efficiency of the monetary policy became greatly reduced by the fact it was missing a fiscal component in the mix (25). It is difficult to realize as efficient a system which promoted income concentration, without any kind of redistributive mechanism on the fiscal side.

The balanced position of the Cash of the National Treasury was obtained by excluding the Cash position of the Overall Balance of the country. Then, an equilibrium was easily obtained, by the manipulation of issues or redemption of Government securities.

This policy in fact correspond to an attempt of divorcing fiscal policy and growth policies. The country is thus supposed to be part of the international system of liquidity, and the imbalances of the balance of payments - while structural because of permanency - are considered to be corrected by foreign indebtment. As there is no existent system of international liquidity, and capital is sold by different costs to different international demanders, we can appreciate the ground of this policy as a simple semantic evolution.

Although the Government did not promote a more efficient fiscal programme, the use of the available resources was orientated in Costa e Silva Administration in the sense of expanding the infrastructural works demanded by new expansion of the industries, and particularly with the automobile expansion (26). These expenditures in the period were expanded to about 29 per cent of the National Budget, while welfare expenditures decreased somewhat their already stressed position. Simultaneously, as we mentioned before, the Public Authorities eased the credit mechanisms and the financing of the stock market to promote further industrialization.

8.4. The Agricultural Performance

As we mentioned previously, the official policies denied in the sixties the existence of "agricultural problems" in the country, characterized by inherent maladjustments. The basic policy followed by the Castelo Branco Government was proceeded under Costa e Silva i.e., bonuses and financial resources were orientated to support the expansion of traditional agricultural exports. Since the domestic demand was reduced by the business squeeze, and the supply to exports was not sensitive to this change in the middle run, the agricultural product was stagnating in the late sixties (27).

Once a strong pressure had been produced in the early sixties toward a reform of land property, Castelo Branco Administration proceeded to a record of rural properties, as well as complemented legal dispositions to unused property to be activated as agricultural enterprises.

The real purpose of the Public Authorities was to compel to some

extent an expansion of the acreage in use to the export-oriented output, a purpose which reflected in the early seventies as an expanded supply + foreign trade. Thus, while official information in the period presented agricultural performance as the most favourable, but agriculture itself presented in fact stagnant and even negative results. Once the industrial activities were again reactivated, this bad performance of agriculture was clearly an expression of the structural maladjustments previously existing, and which characteristics were simply ignored by the new Administrations.

This, in fact, weak position of the agricultural sector seems to have been the cause of the failure of the trade liberalization of the late sixties, since the responsiveness of the domestic primary activities was low, with the exception of mining and mineral extraction. The market approach of the Brazilian agricultural problem should have firstly to consider the low capital endowment of this sector and secondly the growing scarcity of manpower produced by the internal migrations. With special attention to food-producing to the domestic market, the elimination of previously existing railways, the prevalence of truck transportation in general, the gradual introduction of new producing areas in the market, etc. were factors which contributed to hard competition among producers and rising the final prices to consumers. Thus, while the area of agricultural activities expanded considerably and a process of mechanization was in development, changes in organizational structure reduced the final gains of the consumers. (28)

The assumption that agricultural responsiveness was low in face of trade liberalization in the late sixties is visible by the adoption of the policy of mini-devaluation and the establishment of a complicate system of incentives to foment exports.

This official view was also disregarding the institutional mechanisms, by which a considerable amount of small agricultural producers was driven out of the production, reducing thus the competitiveness within the agricultural sector. This forcible drive-out of land of small producers, supported by institutional mechanisms, become more accelerated in the conditions after 1964, and aggravate the living conditions of the traditional producers. It also stimulated the urban-orientated migration, reducing labour amount available in the agricultural sector.

The stagnant productivities in the agricultural sector remained thus through the seventies. With the exception of a certain group of export-orientated farms most of the sector was characterized by extensive activities of the labour-waste type. This certainly explains the persistence of stagnant productivities along the 70s. For example, the average output of beans, which is an important food in the urban basket, remained in the period around 0.6 ton per hectare. Rice and maize were also stagnant in the period: rice varied in-between 1.4 and 1.9 ton per hectare, and maize 1.3 to 1.7 ton /ha. We see, therefore, the paradox that the agricultural policy of the late 60s was not fully favourable to expand agriculture, because it

did not recognize some of the most peculiar problems that agriculture was presenting up to that period.

8.5. The Position of the Balance of Payments.

During the Costa e Silva Administration it was observable that the position of the balance of payments improved extensively. This phenomenon occurred despite the strong capital outflows, as a result those of desinvestments and increasing service payments to foreign capital. The explanation has to be found in the increasing capital inflows, which were connected to the progress of the liberalization policies in the Brazilian market. The period of 1968-1970 of the result of the balance-of-payments showed a surplus of 1,126 million of current U.S. dollars, which has to be considered as a favourable position to retake expansionistic economic policies.

A question arises, however, whether it follows from the favourable position that the country had effectively changed its previous conditions in capacity of payments abroad, in order to face future amortizations of foreign loans plus the current outflows. It seems to be that the Brazilian public authorities worked during all this period on the assumption of a relatively stable development of interest rates abroad; considering, thus, as factual the hypothesis of a future redeemable character of these debts, without squeezing growth.

This assumption was unrealistic. Although the interest rates abroad have been expanding continuously, with the sole exception of Japan, it is possible from the Brazilian government assumption above to evaluate how great the growth rates were expected to be in the period by the Brazilian authorities. When checking this official expectation on the Government documents of the period, it is possible to ascertain that the supposed potential of growth should have to present a two-digit real figure, which was obviously an unrealistic assumption (30). Thus, the hypothesis that Brazil could maintain sustained growth as a result of external savings in the long run seems to deserve the classification of a subjective hypothesis. This assumption seems also extraneous when we remember that in this period was formed the staff which commanded most of the Brazilian economic policy until the present days.

It may thus be observed that the policy of excessive indebtedness was committed already at this phase, possibly under the ideological assumption that a continuous improvement in the terms of trade would occur in the subsequent years in advantage to Brazil. We mean "ideological assumption" because this hypothesis was not evident from the available facts.

A question arises, whether it should be possible for the country to follow up with industrialization policies or if stagnation should otherwise be the option in place of extensive foreign indebtedness. Answering this question in the benchmarks of the Costa e Silva Administration, an analysis of the Brazilian foreign trade position shows that a more cautious attitude should be the adequate one to the Public authorities. The expansion achieved in the period

was based on the activation of unused capacity of the economy. Thus, a considerable amount of the resources gathered abroad were used to pay for the trade liberalization, corresponding to the reversed situation of a supposed burden in exchange resources (31).

We see, therefore, that the eventual favourable position of the balance of payments in the period 1968--1970 was reflecting the growing domestic dependence on the Eurodollars market, and did not otherwise correspond to a policy, in the short run, of financing the industrialization. Unfortunately this was also the fact behind the ulterior extensive actions of indebtedness abroad, adopted as a magic solution by the Brazilian Authorities, in face of the failure, occurred in the period, of the Bretton Woods system (32).

8.6. An Interpretation

As we mentioned previously, Castelo Branco Administration was well-succeeded in its policy to curb inflation, while this policy reduced much the degree of use of the domestic equipment and certainly made the business squeeze worse than necessary. The growing dissatisfaction of the business circles contributed thus to a change of Government, and the Costa e Silva Administration was then committed to make more expansive policies.

This new Administration combined two characteristic moves: (a) to promote further liberalization and (b) to induce increases in the rate of investments. This package to counteract stagnation is generally known under the label of "gradualism", as opposed to the idea of "shock treatment" (33).

The purpose of liberalization was to increase the competition with the domestic less-modernized sectors, as well as stimulating the more capital-intensive activities into the primary sectors. The supposed effect would be the reducing, in the long run, of the exchange cost of these less modernized sectors, as of the agricultural exportable commodities. Simultaneously, preferential exchange treatment was extended to the dynamic branches of the domestic industries, especially those in a position of association with foreign capital, which was allowed to trade free potential loans.

The increased volume of imports which resulted from the trade liberalization was pressing the exchange reserves more than supposed to by the Government Authorities, which both (a) relied on foreign loans to counterwork this trend and (b) introduced preferential liberalization. Since the "cruzeiro" value did not support cheaper imports from abroad, the Government changed this policy for that of preferential or selective liberalisation. This was characterized by periodic devaluations of the "cruzeiro", known as "mini-devaluations".

The Government action was supposed to put an end to the previously existing "distortions", or effects of "structural maladjustments", which, according to the new philosophy adopted, were a result exclusively of wrong previous economic policies.

The Castelo Branco Government reduced the inflation mainly with basis

in the strongly adopted "downheating" of the economy, once the same structural difficulties would later operate when the expansive forces were allowed to come back into the scene. Several measures adopted by Costa e Silva Administration followed up the Branco basic guidelines to feed into the future the by-then postponed inflation. As an example of this measure, it can be listed the growing indexed assets, from Public securities up to real estate bills and rental contracts. This mechanism of monetary indexment was to redeem in the future the estimated inflation rates, a policy which clearly constitutes as an inflationary source.

As regards the interest rates, the Government proceeded also with the previous policy of expanding the value of the Government securities and letting free the ceilings of private rates, although Costa e Silva Administration introduced low discount rates and expanded credit resources to feed expansion and industrialization. This policy was more flexible than the orientation followed under the Castelo period, and undoubtedly this change contributed decisively to the new acquired expansion.

As a result of the credit and financial adequate measures, the financial houses and investment banks entered a new phase of expansion, which gradually evolved into speculation, due to the existing facilities to raise funds. The main purpose of the Government Authorities was to stimulate a more free developmental course of the Stock market, with a certain capacity of self-financing of the corporations by raising funds in the domestic capital market.

The civil construction branch played an important role in the linking between the financial market and the expansion of output. The Real Estate market, as well as housing supply, were alimented by resources achieved by the housing financial system, which applied small savings and compulsory savings to expand civil construction. This system, while playing an important role in the new upward economic movement, provided more housing to middle classes and luxury construction than popular housing, as it previously was supposed to do.

Although the Costa e Silva Government relied more on the use of the existing unused capacity than in new expansion of capacity, this Administration initiated a series of developmental projects and allocated also additional public funds in infra-structural works. This policy allowed rates of expansion over an average of 10 per cent per year to manufacturing activities in the period, and prepared a more strong expansion in the next period, under the Administration of Garrastazu Médici. Once the agricultural output remained stagnant in the period, and the foreign trade position was not much improved, the Government relied strongly in foreign resources in order to promote the adopted policies.

Thus, a final interpretation can be extended as, Costa e Silva Administration was not radically different of the previous one, although corresponding to a phase of more expansive policies, and the export-orientated expansion promoted by the Government Authorities in this period, originated the strong subsequent exchange of imbalances, due to the hasty character of the liberalization trend then adopted.

REFERENCES.

- (1) In "Conjuntura Economica", Fundacao Getulio Vargas (FGV), Nr 2, Feb. 1968, p.43
- (2) To a detailed study on business cycle in the sense we appreciate here, see M. Kalecki, "Selected Essays on the Dynamics of the Capitalist Economy", Cambridge U.P., 1971, pp. 138-145; see also K. Marx, "Capital", vol. 1, N. Y. I.P., 1967, pp. 610-640; see also W. Mitchell, "Business Cycles and Their Causes", U. Cal. Press, Berkeley, 1913, pp.27-38.
- (3) While it is evident the resistance of Castelo's higher officials to promote industrialization through State action, Costa Administration was clearly in line on this point with the spirit of growth of pre-1964 policies. Paradoxically, this point has not yet been taken up by the current specialized literature.
- (4) The perplexity is visible in the amazing amount of resources the post-1964 Governments extended to the Private Sector in order to induce official-inspired directions in the economy. Pre-1964 Authorities would certainly allocate such resources directly as they conceived as best. For the source of this assumption, see post-1964 financial policies in Relatorio do Banco Central, Departamento Economico, several issues.
- (5) The idea of a Federal system of housing financing is generally attributed in Brazil to the Ignacio Rangel (1957). The scheme adopted in 1966 by the Castelo Government is considered as a work of Mario H. Simonsen, later Minister in the Geisel Administration. A source for studying the system is the periodic balance of the National Housing Banking (BNH) and of the financial institutions there included, mainly savings banks and other Government agents in civil construction markets.
- (6) It is generally supposed that the issuing of National Treasury securities is a weapon to avoid direct money issue under imbalanced situations. Thus, an anti-inflationary purpose should be expected in connection with the Treasury securities issues. See Lawrence Ritter, "Money and Economic Activity", Boston, 1952, especially chapter 9; see also Richard N. Cooper, "The Economics of Interdependence", USA, 1968. See also Law-Decrees in Brazil Nr. 1,338 of 1974, July 23, and Nr. 1,494 of 1976, Dec. 7, respectively. These Decrees show the inadequate character of the policies of security issuing of the Federal Government.
- (7) See on the issue Raul Prebisch, "Economic Development or Monetary Stability: The False Dilemma, in "Economic Bulletin for Latin America", 6, March, 1961, pp.1-25. See also R. Prebisch, "The Economic Development of Latin America and Its Principal Problems", in "E.B.f.L.A.", 7, Feb., 1962, pp 1-22. See also ed. by H.S. Ellis, "The Economy of Brazil", especially pp.133-161, Berkely, U.C.P., 1969. See also for the theoretical implication of the financial system, H.G. Jonson, "Monetary Theory and Policy", in American Economic Review, A.E.R., 52, Jun. 1962, pp335-384.

- (8) See Celso Furtado: "O Mito do Desenvolvimento Economico", RJ, 1974; and C. Furtado, "Análise do Modelo Brasileiro", RJ, 1972; see also C. Furtado, "Brasil Pos-Milagre", RJ, 1981; See Milton da Matta, "Concentração de Renda Desemprego e Pobreza no Brasil", IPEA, 41, 1979; and Celsius Lodder, "Distribuição de Renda nas Areas Metropolitanas", IPEA, 31, 1974. See also Anna O. de Almeida, "Distribuição de Renda e Emprego em Serviços", IPEA, 34, 1976.
- (9) For an introduction on Brazilian wages structure, see: Dorothea F.F. Werneck, "Emprego e Salarios na Industria de Construção", IPEA, 40, 1978; Sergio Boisier, Aluisio Barros, et alia, "Desenvolvimento Regional e Urbano: Diferenciais de Produtividade e Salarios Industriais", IPEA, 15, 1971; See also R. Castello Branco, "Crescimento Acelerado e o Mercado de Trabalho: a Experiencia Brasileira" EPG, FGV, RJ; see also A. Mello e Sousa, "Efeitos Economicos do Salario Minimo", APEC, 1971; and Jarbas Passarinho, "Mercado de Trabalho e Salarios", MT, RJ, 1968 see also O. Iório, "Aspectos da Politica Salarial Adotada no Brasil", APEC, 1971 and Lívio de Cavalho, "Principios e Aplicação da Politica Salarial Pos-1964, Brasilia, 1973.
- (10) See Edmar Bacha, "Os Mitos de Uma Decada", 2nd ed., RJ. 1978; and C. Furtado "Análise...", op. cit., RJ, 1972.
- (11) See Maria da Conceição Tavares: "Acumulação de Capital e Industrialização no Brasil", RJ, 1974, and "Distribuição de Renda, Acumulação e Padrões de Acumulação: Um Ensaio Preliminar", RJ, 1975.
- (12) See, for the political aspect of the decision, the specific argument of: Nelso Werneck Sodré, "Brasil: Radiografia de Um Modelo", 3rd ed. RJ, 1977, pp.143-160. See also: Fernando H. Cardoso, "As Idéias e Seu Lugar", RJ, 1980, and F. H. Cardoso, "Perspectivas de Desenvolvimento e Meio Ambiente: O Caso do Brasil vol III, RCB, 1980.
- (13) See Hamilton Tolosa, "Dualismo no Mercado de Trabalho Urbano", in Pesquisa e Planejamento Economico, 5, Jun. 1975, pp1-35.
- (14) See E. Bacha, "O Rei da Belindia: Uma Fabula Para Tecnocratas", U.B., 1974, also in "Os Mitos...", op cit., 2nd ed., RJ, 1978.
- (15) See E. Bacha and Lance Taylor, "The Unequalizing Spiral: a First Growth Model For Belindia", in Quarterly Journal of Economics, Q.J.E., 1976.
- (16) See Francisco Weffort, "Participação e Conflito Industrial: Contagem e Osasco 1968", CEBRAP, 5, 1972.
- (17) See references (9) and (13); see also F. Brito and T. Merrick, "Migração Absorção de Mão-de-Obra e Distribuição de Renda", in Estudos Economicos, vol IV, Nr. 1, Jan. - Mar., 1974; see also F. Brito, "Mobilidade Ocupacional e Distribuição de Renda", Belo Horizonte (BH), 1974. See on the issue also works of Manuel Berlinck.
- (18) This point has not been fully explored in the subsequent literature.

- (19) On the issue, see comparatively D.I.E.E.S.E. - Sao Paulo data on price variations and Consumer Price Index of F.G.V. Compare also implicit deflators of Brazilian National Accounts and Wholesale Price Index of FGV.
- (20) See in support of this argument E. Bacha, "Crescimento Economico Brasileiro Recente e Alguns de Seus Principais Problemas", in "Os Mitos...", op. cit., especially pp.18-21.
- (21) See on the issue: several authors, "Dívida Externa e Estratégia Brasileira de Desenvolvimento", ILADES, RJ, 1981. See also IMF, "World Economic Outlook", 1982.
- (22) On the difficulty of a domestic economy to control a free trade interplay, see: A. Lindbeck: "The Nationalized State in an Internationalized World Economy", Institute for International Economic Studies, 1973; and A. Lindbeck, "Stabilization Policy in an Open Economy With Endogenous Politicians", in A.E.R. May, 1976.
- (23) On exchange reserves and trade ceilings see CACex Guide, Banco Central, and also: S.S. Alexander, "Effects of a Devaluation on a Trade Balance", IMF Staff Papers, Apr. 1952; see also S. Turnovsky, "The Dynamics of Fiscal Policy in an Open Economy", in Journal of International Economics, J.I.E. Feb. 1976, see also E.E. Hagen "An Economic Justification of Protectionism", in Q.J.E., 72, Nov.1958, pp.496-514.
- (24) This point has been taken up only in an analysis of Maria da Conceicao Silva "Public Finance", APEC, RJ, 1980.
- (25) See reference (23) and also: Erik Lundberg, "Svensk Finanspolitik: Teori och Praktik", 1971; see also M. Friedman, "A Monetary and Fiscal Framework For Economic Stability", in A.E.R., Jun. 1948.
- (26) This argument is supported by an analysis of the State Budget in the side of Expenditures, in relation to the period in reference. See also reports of Banco Central do Brasil, Departamento Economico.
- (27) See on the issue: statistical yearbooks of the period, "Anuario Estatistico FURCE, SPGF; and also "Conjuntura Economica", FGV, for the period.
- (28) For a specific argument on the issue it is necessary to check the documents of the associations of agricultural producers.
- (29) This problem was particularly in the seventies, due to the soya bean expansion programme and also Proalcool programme for ethanol substitution of gasoline in passenger cars. This issue is still waiting for a specific research.
- (30) See on the issue: "Programa Estrategico de Desenvolvimento", Planning Federal Department, by Arthur Candal, 1969; see also "Plano de Ação do Governo", of Costa e Silva Government; and "Plano Decenal" of Geisel Government, under the direction of the latter, Minister A. dos R. Velloso.
- (31) This point has not yet been fully explored. For the cost-effects of trade

liberalization see references (22), (23) and also: W. Branson, "Stocks and Flows in International Monetary Analysis", in International Aspects of Stabilization Policies, Fed. Res. Bank of Boston, 1974. See also S. Grassman, "Exchange Reserves and The Financial Structure of Foreign Trade", 1973.

(32) On the failure of Bretton Woods System, see R. F. Harrod, "Money", London, 1969, pp.268-280; see also : Robert Triffin, "The Relationship Between International Monetary System and Regional Systems", in "A Global Agenda for the Eighties", ed. Khadija Haq, Was., 1981; see also "Economie Internationale, Echanges Exterieurs", Paris, 1980.

(33) On gradualism, a preference for - step-by-step remedies against inflation is characteristic in opposition to pure orthodox methods - . While, A. Delfim Netto considers "gradualism" an adequate mix of orthodoxian views and structuralism, Roberto Campos classify it as "bizarre structuralism".

9. A NEW BOOM

"In fact, Brazilians become conscious of a new importance and, particularly, of the future role that Brazil is fated to play in the present century. From a social viewpoint, this phenomenon exists and is spreading all by itself. Each Brazilian, whether he is here or abroad, radiates this confidence. From an economic standpoint, this confidence is reflected in the expansion of savings. Low-income people, for instance, invest in savings accounts, which have grown to the sizable levels of the Compulsory Seniority Fund. The higher-income brackets have discovered the Stock Exchange."

In "Síntese Política" (1).

9.1. Introduction

Once the Costa e Silva Administration embarked in expansive policies, this gradually reflected as increases in the use of the available capacity into the manufacturing industries, with a prevalence of cumulative upward forces in the Brazilian market. Several new projects were committed to this Administration of infrastructural works and of industrial services.

These expansive policies promoted confidence into the Private Sector, which expanded their business activities; this originated to a new boom, now led by the automotive branches. Thus, the Silva Administration "type of mix" promoted industrialization, while strongly emphasizing policies to export expansion.

9.2. The Government of Garrastazu Medici (1969-1974)

This Administration was thus in coincidence with the higher rates of growth of the upswing under the above reference. This upward movement comprehended the period of 1968-1974. As an effort of the political events referred previously in the period 1968-1969, this Administration promoted a strong centralization of decisions being, thus, in a position to make rapid and unequivocal decisions in the economic sphere (2). Thus, this stronger Administration was carried further on with the basic centralization policies, in the spirit of post-1964 forces, a centralization effort which could not be achieved in the previous existing democratic order.

According to this new situation, the Conselho de Segurança Nacional (CSN-national security council) was producing the main strategic decisions and programmes to be adopted in the country. These decisions were further detailed by a small staff, constituted by special working-groups of the ministries in the economic sphere. These staffs worked with strong cooperation, and their proposals were directly oriented by the Minister of Finance and a few members of the CMN (monetary national council). These proposals or working programmes were then approved by larger consultative mechanisms, generally specific councils, and then adopted the implemented decisions. Changes in the process of implementation were

generally decided by the Minister of Finance himself, who, thus, constituted the main force behind the economic policies (3).

The previously existing mechanisms of Congressional and Justice control of Government action were practically removed (4). The Government Authorities were endowed with a position of uncouth power.

9.2.1. Overall Economic Policies

While eventual branch disproportions required partial restrictions also under this Administration, the achieved position was more favourable than that of the Silva period. Although the period 1968--1969 showed a political scenery disturbed by coup d'état and repressive measures against students and workers in particular, the political climate was now characterized by an extensive elimination of opposition in general, a phenomenon which contributed to the centralization achieved by the Government Authorities. The low wage rates and the policy of "minidevaluations" were favoured by the new political developments and contributed also to the strong position of the Government.

Thus, it can be stated that this Administration benefitted from the continuous effort of the previous post-1964 Administrations to achieve a centralized system of decisions, a system which would be also useful in the sphere of economic programming. This assertion embodies the conclusion that Garrastazu Médici Administration continued the main ideas of the previous period, while higher rates of growth were achieved basically due to the fact that the promoted policies came to a maximal favourable effect (5).

The Médici Administration, gathered both at home and abroad a considerable amount of resources to promote market mechanisms and developmental policies. Brazil became one of the major borrowers of Euromoney in the period, and the Brazilian foreign debt expanded some 31.3 per cent per year in the period (1969--1974). The revenue of the Federal Public Debt in securities expanded at an average rate of 34 per cent in yearly basis at nominal terms, and the Brazilian borrowings in the Euromoney market expanded some 19 times (both figures consider the above period). (6)

This policy was also favoured by an improved performance of the agricultural sector, especially with reference to food commodities in 1970, which reduced the price pressure from this sector and contributed to the policies of squeezed wage rate and easy credit to business. As a result of the larger crop in 1970, the expansion of means of payment was 8.7 per cent lower in 1970 than 1969, while the credit was somewhat easier in 1970 than in 1969 (7). Although Garrastazu Médici Administration coincided with higher rates of economic expansion and the adoption by the part of the State of a series of measures to expand the Public expenditure as oriented to promote "durables" expansion, in fact this Administration was not characterized by a radical action in the Private investments' expansion. The reason is that the Government re-oriented the available receipts, through changes in Public expenditures, to support infrastructure expansion.

sion in a larger scale than before. Meanwhile, the most important manufacturing industries, in connection with the durables production, could release additional output with basis in their unused capacity.

9.2.2. Investment Policies

Thus, the investment policies of the beginnings of this Administration, was characterized, with reference to the Private Sector, as relatively calmed down even when compared with the Costa e Silva period (8). (See table 9.1.) Some reasons can be listed to explain this fact. Firstly, when the Médici Administration entered office, due mainly to political repressive measures and agricultural fluctuations, inflation as caused by the expansion of the means of payments, originated counter measures of the Government, with a strong and short-term squeeze. This fact may be interpreted as a source of caution of the Private Sector, which certainly expected some policy similarly to that of the Castelo Branco Administration.

The second reason for the relatively low level of investments up to 1972 may have been the large amount of unused capacity available in the economy, a phenomenon which reduced the expenditures in demand to expand mostly to current operational costs. Thirdly, the "durables" expansion was being produced basically in sectors or corporations with a large amount of this unused capacity, and those corporations were certainly keeping a considerable inventory, as a result of their privileged position in the market. The basic expansion of "durables" produced in this period mobilized generally oligopolies, which were in close association with the Government organisms which promoted this decision, as a result of the weight these oligopolies were already playing in the potential expansive policies (9).

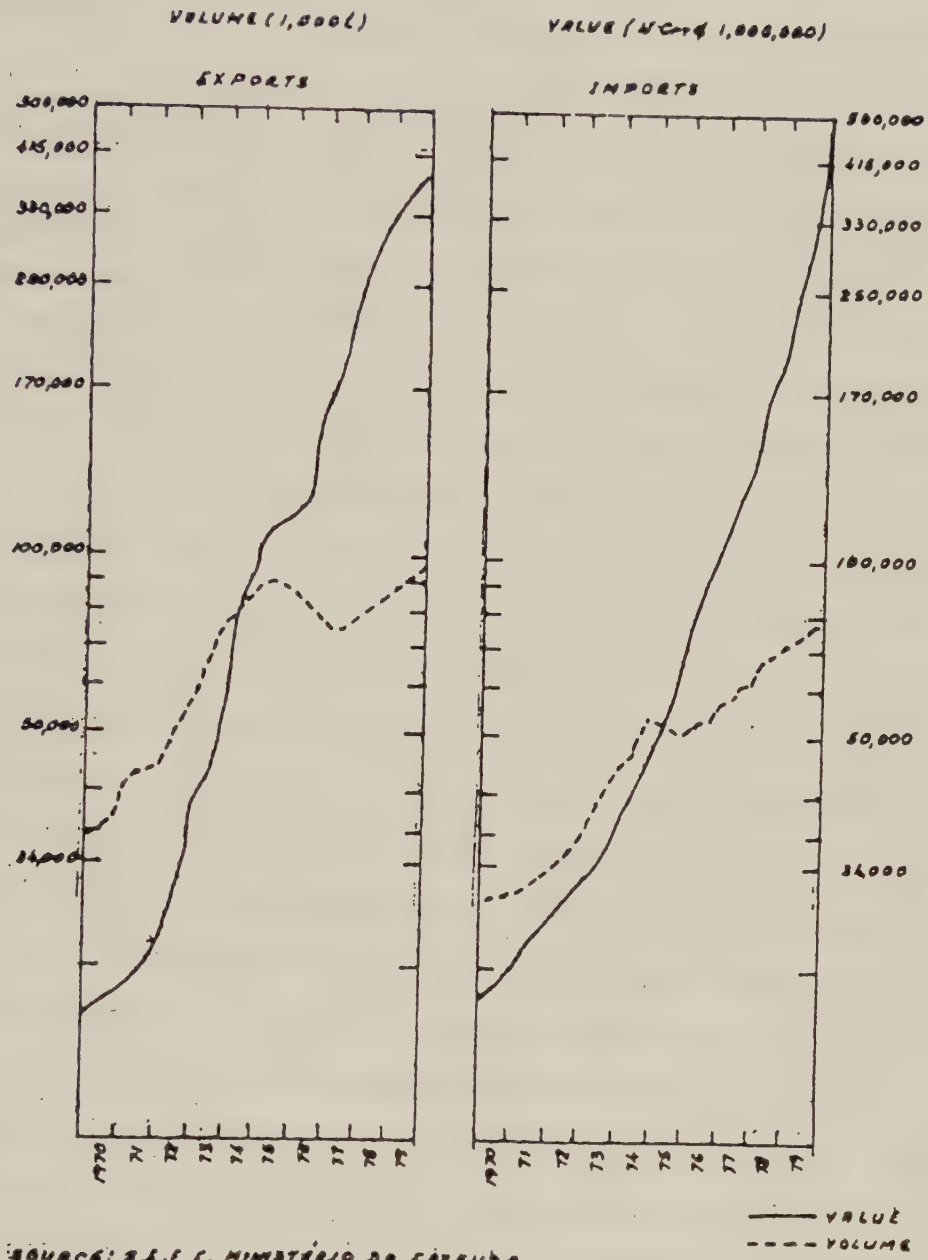
Table 9.1.

(1) Year	(2) Average Real Rate (%) of Growth of Fixed Investments, Brazilian Private Sector
1969	15.0
1970	7.9
1971	13.0
1972	-12.0
1973	57.6
1974	10.0
1975	0.7
1976	-1.9
1977	8.9
1978	12.6
1979	12.5
1980	—

Source: Contas Nacionais, F.G.V.

FIGURE 9.1

FOREIGN TRADE



The explanation for the considerable variation in the rates, can be found in both: (a) in the strong dependence on imported resources and (b) the continuous introduction of innovative equipment. The dependancy on imported resources may influence due to unequal access to exchange values and financing for investment purposes. The continuous innovative character of the investments reflect both the influence of technologies available in the world market and the growing domestic demand for capital -intensive equipments.

Paradoxical, it seems to be the fact that 1972, a year in the expansive period of the Medici Administration, shows a negative figure of 12 per cent. It should be observed also the tremendous figure which is over 57 per cent for 1973. These figures must, in fact, be interpreted together. The mechanism seems to be that, when the investment cycle enter into an expansion, the resources for investment expenditures at home become scarce, relying thus on additional available supply from abroad. This mechanism, of course, require new orders, inventory readjustments and exchange resources to bring the demanded imports. The result is oscillations which certainly reduce the prospected character of the investment.

The fact that a negative number appears in the growth of the real relative rate of fixed investments seems to indicate that the Private Sector was coming near its full productive capacity in the year mentioned, and thus the considerable expansion of 1973 may be interpreted as a reaction to the bottleneck it constituted in 1972. It must also be remembered that 1973 was an extremely unfavourable year in the Brazilian trade developments in post-1964 period, once the imports overcame the exports by 13 per cent in dollar values. This position was made worse in 1974, when imports overcome exports by approx. 77 per cent. Thus, there seems to be a certain relationship between the expansion of investments in fixed capacity and imports, an assumption which is acceptable once we know the strong liberalization policies then in use. This relationship seems also to indicate the heavy burden which constitutes the combination of rapid liberalization policies with more rapid growth policies.

During the Garrastazu Medici Administration, the level of investments, as said, was financed both with domestic and foreign resources. The Government expenditures were also oriented to stimulate the expansion of automotive branches especially the automobile output. The expansion of paved roads and road networks in general promoted a period of capital formation with basis on the expansion of automobiles.

Notwithstanding this basic preoccupation with capital formation, the inflow of Eurodollars generated a climate of speculations, and the Stock Market rose its activities, with the characteristical appearance of a less sound capital market (10).

9.2.3. Factors' Return

The Medici Administration followed up the basic policy of factors' return of the previous post-1964 Administrations. Wage-rates to the less qualified labour remained strongly under squeeze, at one point Governmental officers later

manifested that these squeezes were unnecessary and inadequate after 1972. (11) Welfare expenditures in the Government budget were reduced from 4 per cent in the Silva period to an average of 2 per cent in the Medici Administration. Thus, wage differentials both internal and intra-sectional grew further, contributing to the mechanism of income concentration in connection with durables expansion.

The rate of profits were additionally expanded to branches or corporations which joined the Government's main economic policies. As we know, the Government made a strong effort to promote the expansion of manufactured commodities' exports, aside with an overall expansion of primary commodities. Thus, the corporations which participated in the export effort were granted incentives, under the form of no collection of taxes, cheaper credit, etc. Considering only the reduction of industrial taxes, some industrial export commodities evolved like the following (12):

Year	Export Subsidized Price	Domestic Real Cons. Price
1966	100	100
1967	92	108
1968	98	117
1969	96	128
1970	78	137
1971	72	151

It is clear that the subsidizing mechanism of exports, when referred to manufactured and traditional consumption goods, worked as a reciprocal of the previous existing mechanism of import substitution. This mechanism could only be established and developed under the circumstance of a strong repressed domestic demand for traditional consumption. A key role in this mechanism was performed by wages squeezes, and "mini-devaluations". Thus, a restrictive policy to domestic labour in factors' return should have to be fundamental for the implementation of more diversified exports.

Therefore, under conditions of a repressed domestic demand, the greatest part of the traditional manufacturing expansion was oriented to exports. The expansion of footwear, textiles and clothes in 1968--1971 was 67.6 percent absorbed as exports (13). The expansion which began with traditional consumption items changed, under the demands of the big international corporations operating in the Brazilian market, to export items as electrical equipment, TV-sets, civil construction, all-terrain working machines, etc.

We could thus observe that, in a few years, the country completely shifted from import substitution to export complementarity, and this type of industrialization was basically stimulated and orientated by the Government Authorities.

The larger profits, gathered by the Private Sector and the Government as capital investor, were sources of new expansive moves, which were reflected

as greater expansion in the late seventies.

9.2.4 Prices

Despite the continuance of wages' squeeze, the inflation rate which had been under control in the conditions of "down-warmed" economy began to rise again. This rising trend was primarily manifested in branch variations, and the strong price oscillations stimulated the growing price control for some basic items in strong demand. The CIP (interministry council for pricing) was sensible to the needs of corporations for prices readjustments. The CIP, during all the seventies, and particularly, in the early seventies due to the policy of easy money for expansion, made inadequate efforts to control prices. The policy of relieving from taxes, goods which price controls showed to be inadequate, while contributing to the momentaneous reduction in the price, was incapable of avoiding the overheating situation produced by continuous devaluations and expansionary money supply.

Thus, while wages remained under squeeze, the prices were rising again, and the Government emphasized more and more mechanisms of price controls and indirect subsidies to counterwork the inflation. The price control mechanisms were producing distortions in the prices of important commodities, with several State-controlled corporations transferring, thus, their profits into private corporations and charging the Public funds with negative developments (14). This was in particular the case of the iron and steel branch in the period.

The mechanism of indexed inflation, known as a "stable inflation", was allowing up to this period, the mid-1972, together with price control especially to the labour costs, an expansion of the money supply, credit of durables' consumer, etc. After 1972, this expansion of money supply and credit to consumers was reflected as an inflationary pressure, and the wholesale price index, as well as the living-cost index shot upwards.

9.3. Monetary Policies

The policy of inflationary equilibrium adopted by post-1964 Governments was conducted to a maximum by the Medici Administration, what became reflected in the middle of 1972 as a typical uncontrolled money supply (15). Although the Government Authorities themselves denied this uncontrolled position of monetary supply, it was a result of several circumstances: (a) the past postponed inflation rates, implied in the mechanisms of assets indexation; (b) the systematic imbalances of the foreign trade; (c) the liberalization and devaluation policies; (d) the expansionary effects of credit to producers and durables' consumers.

The mechanism of "inflationary equilibrium", characteristical of the indexation of assets, was an inflationary source simply by its postponing character. It was also used as a mechanism of alteration of the relative prices, once the Public Authorities attributed different rates of inflation to index different assets.

The foreign trade's systematic imbalances induced the Government to issue money and securities to restore some balance in the overall accounts. This position was aggravated by the continuous liberalization, especially when mini-devaluations operated as a permanent mechanism to stimulate exports and reduce the value of the domestic factors. The resulting loss in efficiency in the Private economic policies were compensated by massive inflows of capital resources, in order to pay for the growing capital outflows and restore the balance after each devaluation.

The expansion of durables and correlated commodities expanded the demand for imported items, as well as the need for making the domestic economy raise its productivity in order to compete abroad. Thus, this resulted in growing imports and export of labour intensive items, as well as a reduced demand for labour domestically.

Thus, as soon as the Brazilian economy came into a position of full recovery of the previous down-swing, the expansion began to present characteristics of an overheating condition, an "overheating" which simply indicated the chronic position of the Brazilian foreign trade, with heavy dependancy on capital and equipment from abroad (16). The continuous Public effort to overcome this situation was counterworked by the same type of forces which have occurred before 1964: (a) excessive supply of small range of primary commodities (17); and (b) low capacity to promote the change of this situation simultaneously with industrialization.

9.3.1. Evolution of Reserves and Monetary Expansion

The Garrastazu Medici Administration followed the policy of indebtedness abroad to maintain both: (a) an adequate level of reserves and assure, (b) a more expansive financing of domestic developmental activities. After the strong outflows of resources which were characteristic up to 1968, the position of the balance of payments became favourable in the period 1969--1972 as a result of the prevailing capital inflows. The policy of further cheap money (to credit and financial activities) contributed to strong speculation and, consequently, loss of efficiency in the available investment capacity (18). This produced, as an effect, a gradual expansion of the money supply, with acceleration of the inflation and reduced efficiency of the policy of "mini-devaluations".

In 1968, inflows were responsible for a positive 32 U.S. million of dollars in the balance of payments. The result was 549 U.S. millions in 1969 and 545 U.S. millions in 1970, contributing to cover the trade imbalances and the capital outflows through an expanded capacity of payments abroad (19). This expanding capital inflow may be explained by the confidence the post-1964 Administrations produced abroad, because of their policies of liberalization and labour squeeze. After a slightly tightening of money in 1970, the Medici Administration could thus adopt a policy of expansive money, supported by the strong inflows which presented favourable results in the balance of payments: in 1971, a position of 530 U.S. million dollars, in 1972 a result of 2,439 millions of U.S. dollars,

and in 1973 a position of 2,179 U.S. million dollars.

Although, during Costa e Silva Administration the capital inflows were more a potential inflationary focus, in the period of the Medici Administration this inflationary effect came completely into the scene. (20) Especially after 1972, the open-market operations showed inadequate to compensate for the capital inflows, and money issues expanded continuously the money supply, with upward effects on the prices.

The monetary expansive pressure on the exchange accounts, as mentioned before, was not the unique inflationary element in presence. The continuous expansion of resources to durables production, under the form of producer and consumer credits, as well as the State subsidizing of inputs, were other inflationary focuses.

9.3.2. The New Inflationary Forces.

When the Costa e Silva administration assumed cheaper credit to producers in order to re-feed expansion, it was following up measures estimated adequate in the previous Administration. Thus, when Garrastazu Medici administration expanded the mechanism, the supposition was that inflation was strictly under control, since wages and overall credit remained under squeeze. The assumption of the Public authorities was, thus, that the adoption of expansive credit would not lead into an inflationary situation, once the real inflationary focuses were under control. It is difficult to evaluate how long the Government authorities believed that wages were the effective inflationary source (21). It is clear that the official propaganda also influenced specialized literature, where the things were presented in this way (22). The economic staff of the Government avoided to insist on this hypothesis, due to the absurd character they know it was presenting. But at current document language, the facts were presented as if they did believe wages were the cause of inflation (23). Despite the wages were not the cause of the Brazilian inflation in the period, wages squeezes could expanded the corporate profits margin. It is interesting to observe that the Government reacted slowly to the fact of the wages squeezes had completely lost any efficient reallocative effect after 1972. The "mini-devaluations" followed in force, and the Government policy remained in the supposition that wages were the main inflationary source. Under this premise, a considerable amount of growth which could be achieved with basis in the domestic upward-oriented cumulative forces was neglected, and the Government relied basically on gathered external resources. It was only in 1975, under the pressure of the mounting crisis and of

the Private Sector that the Government was able to abandon, in part, this permanent policy of labour constraint (24).

Once the producers followed up borrowing to carry their large inventories and to purchase durable goods, and consumers also were buying goods on credit basis, the Government should have to allow additional raises in the interest rates before the inflationary expansion become excessive. This policy was in fact not produced, and the reason seems to be that the Government Authorities desired to expand further the achieved growth rates. Thus, the obvious result was that the inflation followed the upward course and possible manipulations on the interest rates became a less effective weapon. At this point (after 1972), the indexed assets mechanism operated also as a source of inflationary pressure. An additional inflationary result was coming from the liberalization effects, since the bonuses and subsidies reduced the Public gains of the expansion and the Government and big corporations followed the policy of indebtedness abroad to compensate for the trade and capital imbalances.

Since the Government made an option for continued expansion, the need for cheaper money to producers expanded also the imports, which became clearly out of control under the conditions of liberalization (25).

We mentioned that the Brazilian foreign debt was growing at a rate over 30 per cent per year, and this fact shows clearly that this upswing was leading to another bottleneck, as well as the previous conditions for "structural maladjustments" under growth process had not been removed by the business squeeze of 1964--1967. It is thus possible to interpret this indebtedness as the country was paying an excessive price for the amount of growth acquired, once a large part of this expansion was produced on the basis of unused capacity (26). A considerable amount of the financial resources carried abroad was achieved at too high interest rates, or floating rates, and the appliance at home was done without Government control whether the purposes were productive or not. Thus, much of this resource was used for speculation, and the profits carried again abroad, with additional demand for exchange values.

Since a large part of State-controlled enterprises were operating with controlled prices, the eventual investments or expansive programmes of these corporations were fully paid with Government money, issued or borrowed abroad. This resulted as a decreasing efficiency of the State-controlled sector, and the Private Sector, especially the bigger corporations, required from the Public Authorities preferential treatment of projects, exchange access etc. on the basis of this supposed inefficiency of the State-controlled corporations (27). This Public policy was, thus, inadequate in the sense it moved back to a position where the eventual gains of the State sector were transferred to private corporations, making these private corporations exhibit an efficiency greater than it was credit for, and letting the Public sector appear as the cause of the domestic indebtedness abroad (28).

On the other hand, the available large capital inflows may have contributed to this reduced domestic effort to promote the efficiency. Scarce domestic

commodities could promptly be substituted with imports, and the inflows reduced - or eliminated - the depressing effect that devaluations were expected to produce on imports. As follows, could, for example imported items be re-exported as components of domestic exportable goods, without a greater concern for the specific exchange balance resulting of this apparent gain in exports (29).

With the rising exports, the content of exchange value of the exportable commodities rose notably, which thus indicates the reduced Public concern to compel producers to save exchange values and improve the domestic capacity of exports through import substitution and lower exchange costs (30). In part, this easy policy can be explained in terms of the low wages' comparatively existence in this period. When the wage participation in the output mix decreases or even rises, in real terms, considerably slower than the real labour productivity, there is a trend to substitute the cost of labour participation by other costs. The corporations consider - reasonably - this decreasing value of manpower as a permanent phenomenon, treating this simultaneously as an effect of increased productivity. As a result of the oligopolistic structure of the market, a considerable part of the additional gains are currently avoided of being transferred to consumers, and the corporations in case substitute, in part, the decreased cost by a new cost, as that of advertising, distribution, etc. The remaining difference is embodied as profit, and thus the gap simply disappear (31).

Under conditions of cheap money, capital is relatively more abundant and cheaper than it should have to be, in fact. The presence of this mechanism, thus, is also unfavourable to the use of labour and the achievement of more balanced growth. Some advantageous importing-substituting devices which are implicit in labour-intensive use become neglected, while simultaneously expand the importation of high technologies and capital goods. Thus, the reinforcement of the bias toward capital intensity was acting in the economy, during this period, as an inflationary force. This inflationary force also contributed to the reappearance of structural maladjustments (32).

9.4. The Agricultural Performance.

The continuous incorporation of unused areas as crop lands in the fifties and the sixties stimulated the intra-branch competition in the agricultural sector, expanded the output and depressed in some extent the agricultural wholesale prices. Despite this, the productivities remained stagnant. Although the official view was to deny the structural character of the agricultural shortcomings, the effort to promote market mechanisms into the sector rendered the first positive fruits in the period 1970-1974.

After expanding some 11 per cent in 1970-71, the agricultural output reacted satisfactory to be only some 60 per cent less expansive than the industrial output, in the seventies, while in the past this position was comparably inferior.

Some of the reasons being able to explain the change in the agricultural aggregate behaviour can be listed as follows: (a) new investments and new crops; (b) new acreage in use; (c) access to imported inputs; (d) growing mechanization; (e) formalizing of the wage structure to labourers; (f) incentives to raise exportable crops.

The implementation of policies of more roundabout methods of production in the agricultural sector was accompanied by a growing export activity (33). While pre-1964 economic policies attributed incentives to raise exports, this aspect was more characteristic in post-1964 policies. In fact, since import-substitutive industrialization used preferential exchange policy, this preference reduced export stimuli toward basically expenditures in domestic money. Imports of agricultural inputs, as fertilizers, pesticides, seeds, etc, were depressed by the competition of other demands which were not producing exchange gains. The same applied to importation of machinery to agricultural purposes, once the country was scarcely producing more advanced agricultural equipment. The post-1964 economic policies showed a more liberal treatment of the problem of the agricultural inputs, despite a considerable effort was done in order to promote the domestic production of these inputs. The conditions of the successive measures of trade liberalization created the resources demanded to finance new expansions of exportable crops.

Thus, as mentioned before, the liberalization measures may also be viewed as an effort to stimulate the agricultural sector, since the expansive behaviour of exportable crops should raise the efficiency on the whole sector. This raise of efficiency would thus be achieved without important institutional changes in the land use and ownership, but mainly under the influence of growing demand abroad.

Under conditions of trade liberalization, the increases in imports should have to affect positively the agricultural sector with extended resources in inputs, once the official policy was to promote exports to balance trade and growth (34).

However, an unfavourable effect would be implicated by exchange liberalization, once the combination of this policy with the trade liberalization should require devaluations or the policy of "mini-devaluations", which took effect as depressing price developments to the agricultural sector (35). Thus, the extensive incentive policies adopted to stimulate agriculture, aside with larger amounts of resources to finance it, were attempts to reduce the developments in agricultural prices, and cut their unfavourable trend.

The Government policy had thus to act in two directions: (a) first, to introduce mechanisms which made the export attractive of domestic crops, according to the price indications of the Public Authorities; (b) second, to compensate the agricultural producers by the costs of intermediary functions and of

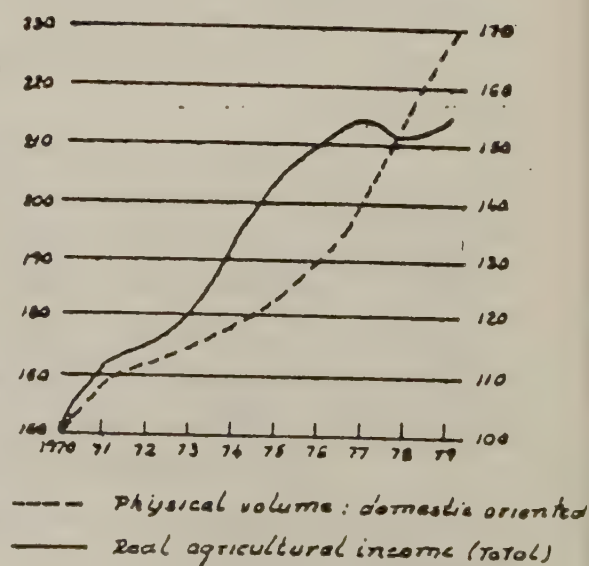
unfavourable prices at home, as an effect of devaluations.

While devaluations generally are in advantage for exporters, in the case of primary producers some other aspects must also be manipulated by Public policy makers to give them full advantage of devaluations: (a) the cost of imported inputs must be financed or subsidized to avoid excessive pressure on the final costs of exportable commodities; (b) labour has to be squeezed not only by the devaluation mechanism but also by some sort of institutional mechanism, which reduces its pressures on operational costs; and (c) preferential discount rates must stimulate cheaper credit to producers of exportable commodities. Thus, it is paradoxical that the export-orientation expands the costs in exchange of the exchange-gaining policies.

Despite the fact that a given amount of capital inflows was used to finance the agricultural expansion, the Government was not able to produce changes in the sector that raised the aggregate productivities of agricultural commodities. The financial resources that were available must therefore be interpreted as more adequate to the extent of the normal operation of the sector than corresponding to additional expansive demands for developmental purposes (36). Another important element in the improvement of the position of the agricultural output was the gradual acceptance of other crops in the international market, aside those which constituted the traditional Brazilian supply. Soya beans, for instance, both as raw material and processed, came to play a growing role in the Brazilian supply abroad (37). In 1973, its total exported quantity amounted to 3,409 thousand tons, while the soya amount in 1976, for instance, was 8,448 thousand tons.

The agricultural area in use also expanded considerably. When comparing the area in use for agricultural purposes in 1975 to that in use in 1970, an added 5 percent is found (38). In the same period, the distribution of area in use, when considered the agricultural establishments with less than 10 hectares, decreased 11.9 percent. Meanwhile, the distribution of land to establishments with between more than 10 ha and less than 100 ha expanded 0.1 in the period. In relation to establishments with more 100 ha and less than 1,000 ha expanded their areas with 10.8 percent, while the others with more than 1,000 ha and less than 10,000 ha achieved an area expansion of 13.6 percent. Finally, the establishments with more than 10,000 ha expanded their area more than 3-fold in the five-year-period. The strong land concentration reflects the Government's policy of stimulating the large agricultural properties, since they have been registered as agricultural enterprises. Simultaneously, the small properties, which were unsuited for market production, are being squeezed and gradually reduced their

FIGURE 9.2.
AGRICULTURAL OUTPUT



self-subsistence of familiar role. The squeeze of the small properties has been very important in supplying cheap labour to the large agricultural exploitations, since the labour of the rural areas has decreased considerably due to internal migrations (39).

On the other hand, on the large property it is more easy to plan the utilization of the agricultural cultures, being more flexible to the Public credit mechanisms when changes are required for adoption of new seeds, cultures, etc. (40). The large property is more useful, thus, to export-orientated agriculture and agriculture related activities, corresponding to the Government's basic aim of expanding the exportable crops. A higher degree of pattern-making is more promptly available in the larger properties, a requirement which is necessary in order to make inputs cheaper and outputs more homogeneous.

With reference to mechanization, the first serious effort to its development was produced in the sixties. This policy was followed up by post-1964 Governments. While being clearly insufficient, the obtained degree of mechanization up to the middle seventies, a large part of the adoption of more modern machinery was produced under Government financial. It seems to be that internationalization only gradually could effect as the promotion of more extensive adoption of machinery in agricultural works. A considerable push for mechanization was produced in the state of São Paulo, once in 1972-1973 a certain scarcity of labour was visible in the harvest period (41). This more intensive policy of mechanization, however, is characteristic of the coming period, of the Geisel Administration.

The expansion of wage structure is also connected with the changes in the organization of land property characteristic of the middle sixties (42). The introduction of a more roundabout relation in the agricultural sector was occurring during all the fifties, but it was after the pressure towards a land reform and the reform of land structure determined by the Goulart Government that the problem became mature to be somewhat accepted by the landowners (43).

The strong migration toward urban areas in the sixties and in the seventies contributed to the adoption of both mechanization on a growing scale as well as the expansion of wages structure in agriculture (44). Paradoxically, in some areas of São Paulo, when periodic scarcity of harvesters was visible, rural wages could move a slice more favourable than the lower urban wages under strong official squeeze (45).

9.5. An Interpretation

The Garrastazu Medici Administration followed up the expansive policies initiated during the Costa e Silva period. This movement toward the full use of the available productive capacity was simultaneous to considerably large capital inflows and an active stock market. Imports and exports increased, and the agricultural sector overcame its stagnant position, now growing at more favourable rates. The expansion of credit both to producers and durables consumers stimulated the expansion, and soon new investments were required. While the agricul-

tural sector diminished its position as an inflationary focus and expanded its output, the overall expansion of the credit and real estate market exerted gradually an inflationary pressure, which, in coincidence with the growing pressure of the exchange accounts, generated another phase of "overheating" of the economic expansion. The upward forces seemed to be stronger than the measures produced by the Public Authorities to control inflation, since the continuous reliance on prices control and capital inflows, as well as on mini-devaluations, extended the rate of inflation and the foreign debt of the country.

It seems that a reasonable hypothesis to explain this reliance of the Public Authorities on the mechanisms which gradually brought back inflation is that the Government expected a large expansion of foreign trade, and this expansion was never that much large as expected (46). Thus, the extreme unequilibrated position that the Government Authorities had chosen to carry on further this expansion became unpractical in the mid-1972 and in late 1973, making the country evolve rapidly into a position of mounting inflation rates and heavier dependency on abroad. In this situation, the excess of wage squeeze practised by the Government and imposed to the Private Sector became a "boomerang" weapon, since this squeeze reduced the domestic market and the margins that the Public Authorities had to postpone the process of accelerated indebtedness (47).

Although the expansion of trade and economic growth was not produced at the rates expected by the Brazilian Authorities, the level of these expansions may be considered as satisfactory. The domestic economy expanded in the period at rates over 9 per cent, and the foreign trade at nominal rates over 25 per cent per year (1969--1973). It seems clearly unrealistic to expect rates higher than those found (48).

Thus, it seems reasonable to interpret also the "overheating" as a result of excess resources, once only a part of these resources were used directly in productive activities. While this considerable amount of them also were used to finance the costs of continuous liberalization (49).

This policy, which was also adopted by the previous Administration, would lead the next Administration, that of President Geisel, into a difficult position, which required extensive changes into the schemes of the policies adopted until then.

Notwithstanding the fact that Garrastazu Medici Administration failed to control the excess capital inflow and the new inflation related to it, the expansion promoted by this Government expanded to a great extent the economic basis of the country. The disposable income experimented an expansion of an average rate of 11 per cent per year in the period (1969--1974), in real 1949 terms. The State improved much its position as a tax collector, the resources being used to expand expenditures oriented to support industrialization. As an example, the collection of direct taxes improved at an average rate of 43.6 per cent per year in the period, considered in real terms. The indirect taxes less subsidies - in the same period - was expanded at an average real rate of 8 per cent per year, reflecting thus a process of differentiation in march into the tax collection (50)

Although this Administration planned for a reduced Public participation in the market, the policies adopted in this direction acted negatively on the State-owned corporations, which were generally working under unfavourable controlled prices and transferring, thus by this mechanism, profits to the Private Sector. This policy also contributed to money issue, and duplication accounting of the Public enterprises, with related negative effects in the coming period.

REFERENCES.

- (1) In "Síntese Política", APEC, July, 1971, RJ, pp.98.
- (2) On the character of the political reforms, see: Celso Lafer, "O Sistema Político Brasileiro: Estrutura e Processo", SP, 1975; Alvaro Valle, "Novas Estruturas Políticas Brasileiras", RJ, 1977; Georges A. Fichter, "O Regime Modernizador do Brasil, 1964-1972", RJ, FGV, 1974.
- (3) For an analysis of the basis of this fact, see: Manoel M. de Albuquerque, "Pequena História da Formação Social Brasileira", RJ, 1981, pp.665-688; see "Doze Bodes e Um Leão", in Jornal do Brasil, March, 31, 1972. See also reference (1).
- (4) See: Carlos Castello Branco, "Os Militares no Poder", RJ, 1979; Alfred Stepan, "Brasil, los Militares y la Política", Buenos Aires (BA), 1974; Jaime Portella de Mello, "A Revolução e o Governo Costa e Silva", RJ, 1979; R. Cabral e R. Lapa, "Desaparecidos Políticos", RJ, 1979.
- (5) See on the issue: Maria da C. Tavares: "Natureza e Contradições do Desenvolvimento Financeiro Recente no Brasil", RJ, 1971, pp.2-28; C. Furtado, "Análise do Modelo Brasileiro", RJ, 1972, pp.6-8, 46-52; C. Furtado, "A Hegemonia dos Estados Unidos e o Subdesenvolvimento da América Latina", RJ, 1973, pp.12-18; Fernando Magalhães, "El Perverso Milagro Económico Brasileño" Santiago, Chile, 1971, pp.2-9; See also articles of José Serra on the issue; 1970-1976.
- (6) According to data of Departamento do Banco Central do Brasil, 1975
- (7) Computed from data of Banco Central and FGV.
- (8) See Fernando Magalhães, op. cit; and Maria da Conceição Tavares, op. cit: "Natureza..." and C. Furtado, "O mito...", op. cit.
- (9) See: Alberto P. Guimarães, "Inflação e Monopólio no Brasil", RJ, 1963; Cary P. Haskins, "Empresas Multinacionais", RJ, 1972; National Industrial Conference Board, "Obstacles and Incentives to Private Foreign Investments", N.Y., 1965; Ch. Levinson, "Capital, Inflação e Empresas Multinacionais", RJ, 1972, pp.20-28; 65-68; 70-74. See also Moniz Bandeira, "1964-1974: Cartéis e Desnacionalização" RJ, 1979; Edouard Balby, "Brasil, País Chave do Terceiro Mundo", RJ, 1967.
- (10) In the early seventies, several speculative impacts were produced in the Stock Exchanges in Brazil, as a result of uncontrolled practices. This reflected not only in the trade volume but also required injections of Public funds.

- (11) This was the point of view of Minister M.H. Simonsen, exposed in late 1976, as well as af a number of economists as Carneiro Netto, in "Politica Economica dos Inicios dos Anos Setenta", PUC, RJ, 1977.
- (12) These estimates of price differentials were computed considering only the reductions produced to export purpose of industrial and trade taxes, but without considering income tax and drawback reductional effects. This process was firstly used in W. Suzigan, inter allia, "Crescimento Industrial no Brasil", IPEA, 26, RJ, 1974, pp.154-155, 156-161-
- (13) See reference (12).
- (14) As an effect of this policy, the CSN (largest State-owned steel corporation) was in 1969 and in 1972 without operational funds large enough to pay its wages bills.
- (15) See monetary parameters as published in the reports of D. E., Banco Central, "A Economia Brasileira", Dec. 1972, Jan. 1973.
- (16) See Banco Central reports and also S.E.E.F., Ministerio da Fazenda, for detailment of trade balance. For trade composition see FIBGE statistical year-books and CACEX bulletins.
- (17) The condition (a) was gradually overcome in the seventies, while this did not change the structural trend for worsened terms of trade. See on this problem in general: A.C. Harberger, "Currency Depreciation, Income, and the Balance of Trade", in The Journal of Political Economy, J.P.E., vol. LVIII, Feb. 1950; and Raul Prebisch, "Dinamica do Desenvolvimento Latino-Americano", RJ, 1964.
- (18) As an example, the exports which also were strongly demanded at home soon experimented collapse in their exportable supply: paper and cellulose (temporarily suspended on Aug. 8, 1973), vegetable oil and livestock feed (also suspended, but in July, 23, 1973) etc.
- (19) See reports of Banco Central, Jan. Feb. Mar. 1971.
- (20) See reference (11). See also the monetary parameters as published by Banco Central, 1972 and 1973.
- (21) See J. Pinheiro Neto, "Salario é Causa de Inflação?", RJ, 1963, pp.10-20; see also interview of Finance Minister Delfim Neto to TV and Press, in Journal do Brasil, RJ, May., 28, 1972.
- (22) See, for example, Luis Zottman, "Inflação, Formação de Poupança e Criação de Empregos", RJ, 1970, and O. Iório, "Politica Salarial no Brasil", RJ, 1970.
- (23) See J. Pastore and A. Maria Bianchi, "A Determinação de Salarios: Uso de Um Modelo Causal", RJ; Jarbas Passarinho, Mercado de Trabalho e Salaaarios", MT, 1968 Mario H. Simonsen and Roberto Campos, "A Nova Economia Brasileira", RJ, 1974, pp.64-66; A. Delfim Netto, "Analise do Comportamento Recente da Economia Brasileira", mimeo, SP, 1967.

(24) In fact, the relaxation endured less than a year. In Oct. , 1975, the metal branch workers in São Paulo were, to some extent, tolerated in their claims for higher nominal wages by the local Private Sector. In June 1976, the Federal Government reacted through a change in the formula for computing the wage rates, and a component for expansion of the purchasing power was then included to reflect the developments in foreign trade. Through this component, the wages re-adjustments were tied to trade expansion abroad, while the most of the domestic industries were not exporting. Walter Barelli, of DIEESE argued that the measure made that the most of wages of workers, should be reduced some 2 percent more in that year. See "Visão", Aug. 9, 1976.

(25) The Government officers attributed in the period a minor importance to this uncontrolled money supply, considering aphoristically that the economy was passing a "zone of turbulence". As a result, the bulk of the disequilibrium was passed further on to the Geisel Administration, a fact which combined with the oil crisis lead the country into a more heavy indebtedness.

(26) The problem of the cost of a liberalization policy in a developing economy is different to that of LDC, since LDC are generally involved in sustained indebtedness, which gap is further extended by devaluations. See R. Prebisch, "Economic Development or Monetary Stability: The False Dilemma", in E.B.F.L.A., 6, March, 1961, pp.1-25.

(27) In fact, in the early seventies, the Government moved back toward pre-1964 policy of indirect subsidizing, were Public industrial services and corporations sold underpriced services and commodities to Private corporations and individuals. See Roberto O. Campos, "Estruturalismo Bizarro", interview, RJ, 1974.

(28) See reference (14) and also : Fernando Rezende, Carneiro Netto, inter alia, "Aspectos da Participação do Governo na Economia", 26, IPEA, 1976; Elisa Caillaux and Walmer J. Soares, "A Política Econômica Governamental Dirigida às Pequenas e Médias Empresas", RJ, 1979; Isaac Kerstenetsky and Annibal Villela, "As Modificações no Papel do Estado na Economia Brasileira ", in Pesquisa e Planejamento Econômico, vol. 3, nr.4, Dec. 1973, pp.908-909; R. B. Newfarmer, "O Takeover das Transnacionais no Brasil e o Controle sobre o Mercado", in Pesquisa e Planejamento Econômico, vol. 8, nr.3, Dec.1978, pp.621-662.

(29) See: Mansour Dailami, "Inflation, Dollar Depreciation and OPEC's Purchasing Power", in The Journal of Energy and Development, J. of E.& D., pp.336-343, 1979, Spring; m. Kurz, "Arrow-Debreu Equilibrium of an Exchange Economy With Transaction Cost", in International Economic Review, I.E.R, 15, nr 3, Oct. pp.699-717; Rachel Mc Culloch, "Unexpected Real Consequences of Floating Exchange Rates", N.J., 1983; Karel Jansen, "Monetarism, Economic Crisis and the Third World", London, 1983.

(30) In fact, the post-1964 Governments were so hostile to import-substitution alternative that they proved to be miopes for this possibility until the Figueiredo Administration.

- (31) On the oligopolistic behaviour, see: Victor Perlo, "A Ofensiva dos Monopólios", RJ, 1972; Paul Sweezy, "Teoria do Desenvolvimento Capitalista", RJ, 1962; A. Arzumánian, "La Crisis del Capitalismo Mundial en la Época Contemporánea"; C. Furtado, "A Hegemonia...", op. cit. and Conceição Tavares: "Acumulação de Capital e Industrialização no Brasil", RJ, 1974.
- (32) See C. Furtado, "Brasil Pós-Milagre", RJ, 1981; Kent Hughes, "Factor Prices, Capital Intensity and Technological Adaptation", in "Contemporary Brazil: Issues in Economic and political Development", ed. W. Tyler, N.Y., pp.125-136.
- (33) See: Carlos von Doellinger, inter alia: "Transformação da Estrutura das Exportações Brasileiras, 1964-1970", IPEA, 14, 1973; F. Fajnzylber, "Sistema Industrial e Exportação de Manufaturados", IPEA-CEPAL, nr. 7, 1971; M. Silva Pinto, "O Controle do Comércio e o Desenvolvimento Econômico do Brasil", 1972; "Sinopse Estatística do Brasil", FIBGE, 1971 and 1981, chapters on Agriculture and Foreign Trade.
- (34) See Carlos V. Doellinger, inter alia, "A Política Brasileira do Comércio Exterior e Seus Efeitos", 1967-1973, 22, IPEA, 1974.
- (35) See Thompson, R.L.; "The Metaproduction Function For Brazilian Agriculture: an Analysis of Productivity and Other Aspects of Agricultural Growth", Purdue, 1974; Comissão de Financiamento da Produção, "A Política de Preços Mínimos", Estudos Técnicos, 1949-1979, Brasília, 1979.
- (36) See Annibal Villela and W. Bauer, "O Setor Privado Nacional: Problemas e Políticas Para o Seu Fortalecimento", 46, IPEA, 1980, pp.295-296; see also, Reports of producers and importers organisms, as "Sindicato das Industrias de Defensivos Agrícolas do Estado de São Paulo".
- (37) See: Banco do Brasil, reports of Departamento de Crédito Rural; and CACEX bulletins.
- (38) See statistical yearbooks in the period: FIBGE.
- (39) See: José Pastore, "Agricultura e Desenvolvimento", RJ, 1974; Ruy Paiva, inter alia: "O Setor Agrícola do Brasil: Comportamento Econômico, Problemas e Possibilidades", SP, 1973.
- (40) See: Carlos Von Doellinger: "Transformação ... " op, cit., pp. 42-61; Conselho de Desenvolvimento: Grupo de Trabalho de Fomento à Exportação (FOEXP), Doc 24, 1958.
- (41) See: "Conjuntura Econômica", Feb. 1974. Paul Singer, "O milagre ..." op. cit.
- (42) See: reports of Serviço de Estatística da Previdência do Trabalho (SEPT), "Inquerito do Salário Mínimo", and "Levantamento do Custo de Vida no Brasil",.
- (43) This point of view was admitted by R. O. Campos, while Planning Minister of Castelo Government, in a TV debate, 1966.
- (44) See reference (36). See also: agricultural producers' association in São Paulo, periodic reports.

- (45) See magazine Visão, numbers of Apr. 1974 and also Veja, June 1975.
- (46) See: Ernane Galveas interview to Visão, Aug., 31, 1976, pp.38-40.
- (47) Although largely admitted in the academic debate and business circles, this point was not publicly accepted as being correct by the Government, until the Figueiredo Administration.
- (48) The Plano Decenal (ten year plan) elaborated in Geisel Government presented average rates over these values to the period initiating in 1974.
- (49) It is still missing a quantitative characterization of the issue.
- (50) This differentiation was not enough significative as to express a change on the tax policy, since it was reflecting only improvements in tax collection. See reports of the Centro de Estudos Fiscais, IBRE, FGV.

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10. HOW TO ADJUST?

"Criticism of the multinational enterprise (MNE) is but the latest attempt to dispel complacency over the relevance of the neo-classical theory of international trade for development problems. A social benefit-cost analysis of private overseas investment may be most generally interpreted as part of the wider issue of the gains from trade versus gain from growth. At first, critics of neo-classical trade theory attempted to discredit the theory's power to explain historical development by arguing that international trade had actually operated historically as a mechanism of inequality. After the establishment of the post-war international economic institutions, the argument shifted to a criticism of the alleged biases and deficiencies of the international institutions comprising the Bretton Woods system. And now the MNE has become the object of criticism, with pessimistic warnings about future detriment to the developing countries if the MNE is not sufficiently regulated and its power reduced." (1)

G.M. Meier.

10.1. Introduction

As we know, the Castelo Branco Administration was basically oriented toward reducing the inflation rate through reduction of the available capacity and wages squeeze (1964-1967). This Administration, thus, prepared the conditions for a new favourable rate of profits, and consequently a new expansion which was promoted by the Costa e Silva Administration, with use of the available unused capacity and capital imports to balance the trade position of the country (1967-1969). The Silva Administration was followed by that of Garrastazu Medici, which used the expansion of capital inflows to promote a new overall industrial expansion, being the durables of the main branch connected with this expansion. (1969-1973)

All those Administrations emphasized the need for expanding exports, and the economic policies in use were related to promote the expansion of exports while reducing imports. One of the main instruments to reduce imports was the adoption of a rigid wages rate, clearly under the level of consumer price rises, which was thus supposed, with the elimination of favoured import prices to consumers, to restore or establish a trade position without the pressures of an excessive demand. (2) As we know, the level of the aggregate income was being expanded as a result of the use of additional productive capacity, as well as the effect of available external savings. Devaluations, sustained raises in exports and durables expansion contributed also to the income concentration and the development of a dual market situation in the urban areas, under the effect of more rapid growth. (3) The option for expanding the durables, especially the automobile output, required of course a process of further income concentration than the previously existing once the general level of domestic income, as we referred to before, was relatively low. (4) Thus, the broad lines of the adopted

economic policies, analyzed in the different Administrations until now, were common in the sense of directioning the economy to this process of more rapid growth based on the expansion of the income capacity of the more wealthy sectors.(5)

This option for durables not only implied an option for automobile plants, highway expansion, real estate development, etc. but also implied an extensive support within the domestic economy to a relatively small number of corporations, which owned the main assets in the branches which were subsidized to expand.(6) Thus, when looking into the branches which were more expanded in the period 1967—1973, we found they were namely transport equipment, electrical equipment, machine tools and parts, petrochemicals and chemicals and non-ferrous minerals.(7) The fact that multinational corporations (MNE) control the first three mentioned branches has been interpreted as an option of the Brazilian Government Authorities to promote the export sector based on MNE.(8)

The Government generally explain this option with basis on the fact that the MNE owns a large market abroad and can introduce technological processes in the country which otherwise would be more expensive for the domestic economy to acquire.(9) The most important point is, in fact, that these international giant corporations were free to trade resources abroad, due to the liberalization policies, which contributed both to the expansion of the imports at Brazilian domestic level as well as promoted the strong process of indebtedness of the domestic economy.

Thus, with reference to the industrialization process and the use of the domestic capacity of the manufacturing industries, the policy adopted until the end of the Medici Administration was of: (a) strong capital inflow, (b) use of the available unused capacity, (c) promotion of exports through incentives and subsidies, (d) promotion of projects oriented to durables expansion and exports.

Despite the fact that the preparation of expansive exports was supported by reallocations in the domestic production and capital inflows, a policy of periodic devaluations was also adopted in order to lower imports and raise the domestic efficiency to compete abroad. The mechanism functioned relatively well during the period 1967—1973, but the excessive inflow of foreign resources was an impact in the market as an inflationary force.(10) The Government expanded its expenditures as well as the monetary parameters grew a lot, especially after the mid-1972, reflecting as expansive imports and domestic scarcity in some resources.(11)

Thus, in early 1974, President Geisel's new Administration had to answer the question: how to adjust?, in order to achieve some equilibrium in the balance of payments and of the trade and thereby promote further growth.

10.2. Overall Economic Policies

The first problem which the new Administration dealt with was the uncontrolled money supply, caused by the strong capital inflows, trade imbalances and

unequal credit expansion. Once the Geisel Administration had a prospective Ten-Year Plan to enforce, the option of the Public Authorities was toward an immediately strong money squeeze. The idea was that if the money supply was possible to control in short-term, then this Administration could use the rest of the period to implement adequate growth policies(12). Thus, a strong money squeeze was promoted in the first year of this Government, on the assumption that this inflationary force was quite similar in nature to the one which disturbed the first year of the Garrastazu Administration (13).

The policy chosen was quite similar to that of the "shock treatment" we mentioned as characteristic of the Castelo Branco Administration. The first year's experience showed that the Government team was not united in the point-of-view of the adequate method to avoid recession. A part of the Government's economic officers characterized this policy to beat inflation as one of the running near-recession. The Private Sector resisted the enforcement of the measures as far as to openly criticize the Government, and the "hard-monetarist" line was in a difficult position (14). An important explanatory point in this sensitivity of the Government towards corporate criticism was based on the fact that many of the high officers of this Administration pertained to the previous Castelo Branco Government, and they had the unpleasant experience that the Private Sector had had an echo in the military barracks (15).

Interest rates were at high levels, and they remained high during all this Administration. The cheap credit was now promoted by clearly administrative mechanisms, a phenomenon which worsened the position of the small enterprises sectors. The Government combined: (a) mini-devaluations, (b) reduction of demand and (c) wages freeze policy to reduce rising prices and mounting inflation. The expected advantages were: gradual productive investments and additional employment, phenomena which were visible under 1974 and 1975, without a clear relationship with the Government overall policy (16).

In fact, the Geisel Administration was suffering from the effects of the prices control that the previous Administration had used. Prices control damaged basically the State-owned sector and which made artificially cheap inputs that had stimulated the demand. The Government called this "stocked inflation" and the effort to reduce demand, real wages, etc. were connected with the desire of this Administration to promote its own line through the Ten-Year Plan. Thus, the prices were increased 13 per cent more in 1974 than in 1973, while the adjustment of the productive factors were underpriced, with the exception of capital costs (17). This policy showed to be inadequate in face of the international prices' development, with decreasing prices for Brazilian exported commodities and rising prices for industrial goods and particularly to oil abroad. Once the country had entered a strong process of durables expansion, where the automobile output was a decisive force, the new oil cost found the domestic economy in a heavy dependence of this imported factor (18). As an effect of the strong imbalance, the net debt of the country grew 2-fold in a single year (19). Despite the strong resistance of the Private Sector, the new policy was slowly producing a

Figure 10.1 São Paulo State Income

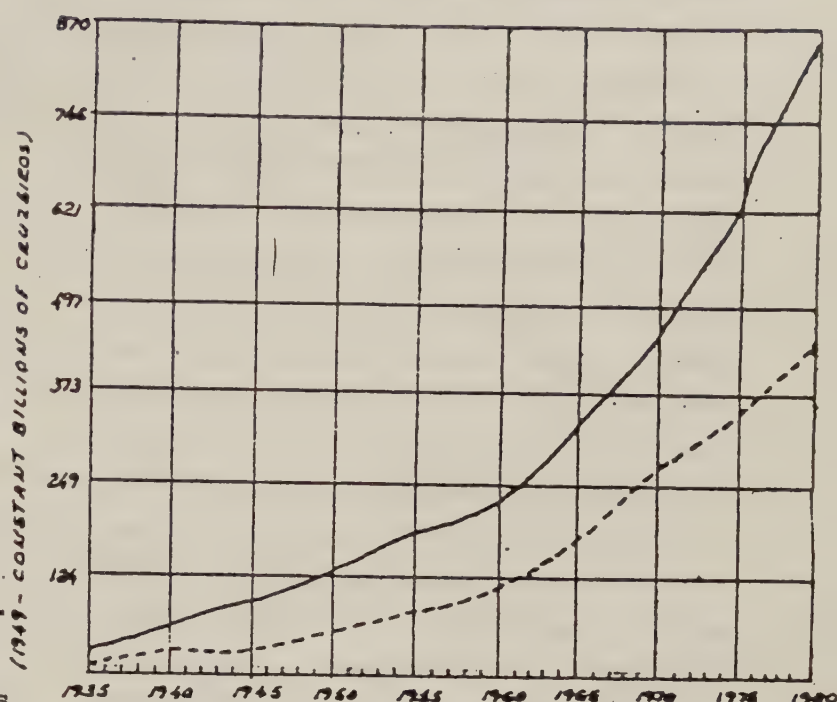
warming-down in the economy, and the strong credit reduction, as well as decreasing net resources from abroad were thus reflected as the slowing down of the industrial output.

The performance of the agricultural output was favourable in 1974 (+ 8.5 per cent) and contributed to reduce the inflationary pressure, but the result was less notable in 1975 (+ 3.4 %) and 1976 (+4.1 %) (20). The Government gradually shifted its emphasis from industrial machines expansion to agricultural expansion, since this sector required imported inputs of a less mounting price abroad (21).

As a Government decision in late 1974, a more favourable trade of wages was allowed into 1975, in order to promote somewhat the domestic demand, which strongly calmed down in the last quarter of 1974. In order to implement this more flexible policy, the position of the Finance Minister of the Geisel Administration was growing stronger. This Minister, while being a key personality of the Castelo-Geisel political group, was a characteristically "gradualist", avoiding thus a clear monetarist approach to Brazilian economic policies (22). The fact that the Private Sector simply opposed the Government policy in the late 1974 was decisive to influence a more flexible approach of the Public Authorities, once the Government's purpose was still strongly recessive (23).

10.2.1. Investment Policies

If we keep in mind the above general circumstance, it is not difficult to understand the investment policy induced by this Administration. When the Geisel Government came into office, a group of projects had been promoted by the previous Administration and were under financing. These projects mainly comprised the already traditional combination of big hydroelectrical plants, road networks, mineral extraction and transportation facilities, etc. The point-of-view of the Geisel Administration was clearly oriented to a different emphasis. Geisel himself, a previous "lieutenant" in the 1930 Revolution, believed that the emphasis should be placed on the production of machine tools, which consti-



SOURCE BANCO DO BRASIL, FGV, FINEP; SÃO PAULO STATE OFFICIAL DOCUMENTS

ADJUSTED VALUES:

— GROSS INTERNAL INCOME
 - - - GROSS INDUSTRY INCOME

tuted according to his expression, the Achilles heel of the Brazilian modern industrialization. Geisel also believed that Brazil should develop more close ties with the E.E.C. and Japan, while letting stationary the dependence of the USA. Thus, a new set of projects was worked out in order to emphasize rapid expansion, when the trade and exchange accounts showed the growing difficult position of the Brazilian economy in the middle seventies(24).

The first attitude of the Government was to strongly reduce the demand which consequently implied the real reduction of the Government expenditures. Thus, the investment policy of the Government was extremely selective, while the capital cost were rising abroad due to the so called "oil crisis". The mix intended to emphasize the equilibrium through the reduction of imports. But, as we argued before, the export-oriented industrialization was highly sensitive to reductions of imports.

In order to counteract the downward effects of reduced resources in exchange values and extremely rapidly growing indebtedness abroad, the Government made efforts to promote branches of the domestic market, especially those which were consuming less exchange resources and could in some extent contribute to raise the exports. The exchange crisis could not be counterworked in a short period, once the bulk of the imports represented a trend which was amounting in the last decade, as an instrument of the re-directioning in the economic policies. The wages squeeze was thus, aside from "corrective inflation", the adequate instrument to reduce the demand and raise the effectiveness of the continuous mini-devaluations. Under these options, the effect of nominal investments in the Private Sector was much reduced in real terms, and these investments showed clearly a fluctuation pattern which indicated the contradictory measures under this Administration. From table 10.1. it is also possible to see that the two last years (1978, 1979, ...) were expressing a more stable investment rate of the Private Sector, which proves the establishment of the "inflationary equilibrium", a policy generally attributed to the import-substitution type of supporters. Unfortunately, this trend was also temporary, since unfavourable developments were also characteristic of the early eighties.

FIGURE 10.2
WORLD TERMS OF TRADE

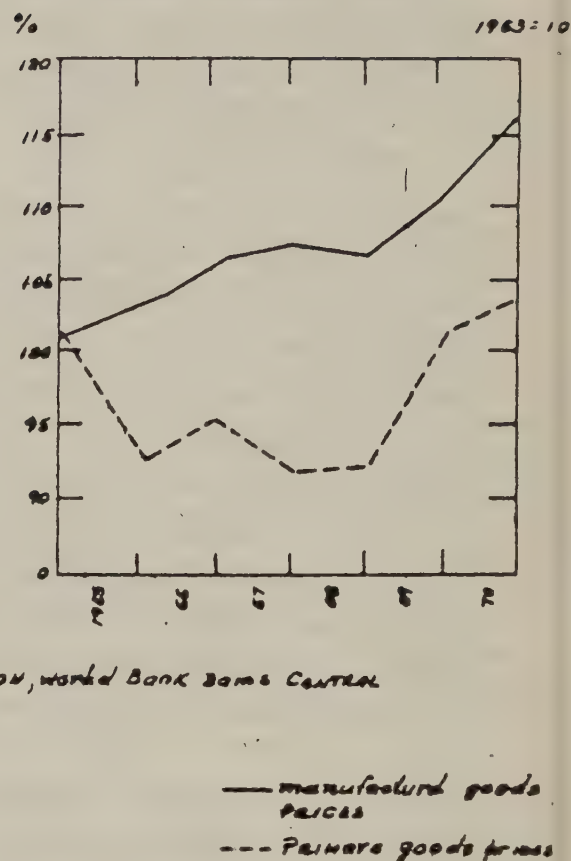


Table 10.1

Brazilian Real Investment in the Private Sector
1949 billions of Cruzeiros.

Year	Amount	Added Percentage
1965	72,0	25.1
1966	90,1	-5.4
1967	85,5	24.1
1968	106,1	5.5
1969	112,0	15.0
1970	128,8	7.9
1971	139,0	13.0
1972	157,0	-12.0
1973	140,2	57.6
1974	221,0	10.0
1975	243,2	0.7
1976	244,8	-1.9
1977	240,3	8.9
1978	261,6	12.6
1979	294,5	12.5
1980	331,3	...

Source: F.G.V.

10.2.2. Policy of Factors ' Return.

The Geisel administration followed up the previous policy of free interest rates, which were sensible to the reinforcement of the Government securities as papers of high return in the market. This policy was followed by a strict control of credit, with the use of more favourable rates when a project was considered adequate with the Government reallocative targets. This tight-money policy was considered necessary to control the inflationary developments, a phenomenon which did not occur, as we can see from a single inspection of the figure of prices evolution in the chapter 7.

This policy of high return to capital was supposed to perform a selective function in the expanded domestic market. While this, the labour remained under wages squeeze, with the exception of the year of 1975, when a more soft line was adopted to wages readjustment. Thus, the Government policy to factors' return seems to have been expectating large capital inflows, and re-taking expansive orientation soon, with basis on these inflows. In fact, the Geisel Administration avoided to make changes in the basic previous policies.

although they intended to introduce changes which could raise the efficiency of the so called "Brazilian model" (25). Once the economic debate increased from 1973 onwards, the Government was also under pressure to advance the official views on the main economic policies and their desirable changes (26). This was a new fact, since the post-1964 Administrations never had tolerated open criticism to their policies. The Ministries' participation of the economic area in the debate made clear that the Government now comprised dissenting views (27).

In relation to wage rates, with the exception of the relatively free wage policy of 1975, the Government was generally restrictive, while more restrictive in the period of 1974 than of 1977—1979. An interpretation could be established as if the Geisel Administration was more and more oriented to home market policies, and this gradual shifting was reflected also in the orientation of the policy-makers. Despite this gradual move to a milder policy, which certainly resulted from the conviction, at the decision level of the Government, of the inadequate character of tight wage rates, the Government of Geisel was basically squeezing wages in the period 1974—1977.

It seems that the relaxation of the tight wage policy resulted from the fact that the Federal Government desired to counteract the income concentration that followed as a consequence of post-1964 policies. This income concentration policy was certainly reducing the forces of the home market, and the Geisel Administration was thus in need for attempting differentiations in the official policies in order to check the real potential extension of the home market (28). The policy of high interest rates was interpreted as having missed the desired effect, i.e. the large majority of the corporations, which were the small and medium sized, reduced the output as well as employment, stocks and operational expenditures in general. This was not only contributing to additional inflation through price readjustments while reducing the income of workers through unemployment (29). In relation to the big corporations, since their output generally expressed an oligopolistic condition, the effect was a declining output with rising prices, in order to maintain the rates of profits as stable as possible (30). Thus, the Government effort to reduce the liquidity of the economy was squeezing the small and also to some extent the medium sized corporations, while the big corporations could manipulate their prices to avoid the effects of the corrective inflation; promoting more inflation (31).

The preservation of the big corporations' profits margin was of course an important condition of the economic policies in the period. The Public Authorities intended, through the use of this mechanism, to have the big corporations fully engaged in the gathering of resources abroad. The satisfaction of the big corporations was also important to maintain a climate which induced other corporations to enter the domestic market, and thus contribute to future expansion.

Although this new element can be visible in the business adjustment promoted by the Geisel Administration, i.e. different corporate sectors, the Public Authorities were more tolerant to small and medium business now than what they had been in the period of Castelo, with a less strong increase in the unused

capacity (around 20 per cent in 1977) (32). The reduced output of the traditional sector can also be paralleled by the growing unemployment, and these two factors can be interpreted as a mutual cancellation in market terms.

Nevertheless, gradually, the general declining demand saved as much durables output as possible, entering the economy in a slow pace of growth more compatible with the strong rise of imported items and the fall in the prices of exported commodities (33). This general policy maintained thus the basic trace from post-1964 of return to the economic factors, i.e. depressing gains to labour and favourable or relatively stable gains to capital, to payment of services from abroad, etc.

10.2.3. Prices

The "repressed inflation" inherited by the Geisel Administration and the unfavourable prices in the foreign trade required a policy of continuous market and exchange re-adjustment, which followed the basic liberalization policies sketched before (34). The use of "corrective inflation" combined with high interest rates stimulated the price rises, with a sustained expansion of the monetary parameters (monetary base, means of payment, currency issued, loans to the banking system). The position of the mentioned parameters was of course reflecting the immediate targets of the monetary policies.

The FGV variation index for the domestic General Price Index is less reliable when referring to the post-1964 Administrations before Geisel. The values there indicated as the rates of inflation in this administrative period, although visibly manipulated, are more reliable in the sense they express a necessary connection with the evolution of other economic magnitudes: the index shows to 1974 the value 34.5, to 1975 it is 29.4, the value ascribed to 1976 is 46.3, while that of 1977 is 38.8. The year of 1978 shows 40.8 and 1979 presents 77.2 (35). Thus it can be concluded the progressing rates of inflation as an expression of the export-orientated industrialization policies, under conditions of unfavourable international trade and, consequently, rising indebtedness abroad (36).

Since the policy of factors' return applied by the Government could not allow manipulations to the extent of profits of big corporations, the scope of Governmental action became reduced to the decreasing elasticity of the home components of macro-policies, i.e. additional liberalization should be used to produce positive response of the domestic economy. This basic decision implied obviously an option for inflationary action, were additional squeezes on the dual urban market provided, if possible, the demanded resources for maintaining the profit rates of the economy.

In fact, this new gradual policy expansion of the "corrective inflation" aside with the indexation mechanism must be interpreted, essentially, as an inflationary policy which was not much different from the previous "inflationary financing of growth" existing in the pre-1964 mixes (37). The existing difference consisted of basically that now the Monetary and Public Authorities were in a stronger position, not only due to the of the previous elimination of

the congressional mechanisms of Government control and also due to the fact that in the middle seventies the Government was equipped with a more complex State mechanism to implement the desired policies, as well as using sophisticated simulation techniques to achieve adequate projections (38).

The gradual shifting of the Geisel Administration's emphasis from machine tools industries growth to agricultural expansion was also in connection with the basic shortcomings of the post-1964 policies. The first important aspect of the agriculture policies was the need for assuring a growing supply abroad, whichever the price development possible for the Brazilian foreign trade. The second point was to expand the domestic supply of foods and industrial inputs (especially Proalcool, sugar-cane, alcohol, producing programmes to auto demand), in order to assure a normal functioning of urban demand and avoid additional bottlenecks. The third important aspect was to induce a growing agricultural demand of domestic industrial equipment, promoting thus a broad change in relative prices.

The adoption of this new emphasis was of course in near connection with a new inflationary run, once the capitalization of agriculture should have to be promoted basically with the domestically existing resources, and consequently inflationary mechanism would have to be important to readjust income developments (39).

We see, therefore, that the change of Governmental emphasis toward maximal allocation of the domestic resources was also important in the option for a kind of business adjustment with an inflationary component. At this point, the Geisel Administration separated itself from the orthodox views of post-1964 policies, which considered the causes for inflation as of an analytical nature and filiated itself within the structuralist view which generally find out institutional causes and peculiarities for an inflationary run. This "bizarre structuralism" prepared in fact the end of the previous post-1964 type of economic policies (40).

10.3. Monetary Policies

We have argued that the Government, while publicly showing a firm decision to fight inflation, adopted in the long run a policy of inflationary use of income reallocations in order to promote agriculture capitalization and also a sustained rate of profits to the big corporations. This interpretational hypothesis is founded on the fact that the Government was gradually losing the control over the monetary components, and the short run combat of inflation was in fact adjusted to long run structural components, since the domestic return to the economic factors as not being expressed in the Brazilian advantages in the international division of labour (41).

The Government Authorities generally considered a low wage rate as the best use of the Brazilian endowment in labour. Although this policy was not combined with an intensive and even substitutive use of labour, i.e. a labour-pre-dominant final composition of output, the Government Authorities judged this

per se a sufficient condition to attract international resources and corporations (42). Since the Government policies reduced or counterworked the emphasis on import substitution policies, the cost for capital was rising, as well as the demand for imports of more expensive items expanded continuously. We see, therefore, that the emphasis on more capital use made less relevant the characteristic normative of low wage rates.

Simultaneously, while a tremendous unused amount of labour was being accumulated in the urban areas, especially as an effect of post-1964 use of land-policies, the Government emphasized the capitalization of agriculture, based on the fact that it had cost less exchange amounts than further promotion of industrialization. To summarize the arguments, the basic cost for additional agricultural capitalization required basically Government-controlled or produced resources. Furthermore, components as transport costs, oil imports, etc. have been rising extensively in the late seventies, and the Government used this fact to expand its funds through indirect taxation. The resources gathered in this way were oriented generally to expand Proalcool programmes, and thus increase the pressure on the domestic capacity to produce food and foodstuffs (43). Therefore, some Public resources should have to be oriented toward expansive agricultural use, in order to alleviate oil-induced pressures on the economy.

Thus, the decline of final demand, especially when in reference to basic items of the traditional branches, was an important component to assure an "inflationary equilibrium" and - consequently - allow the Government to promote more easy credit to a new expansion.

When looking into the balance of the means of payment (in Dec. 31) as divided by the balance of the circulating paper-money in the period, we have the following multiplication coefficient, as an indicator of the monetary behaviour:

1973	5.51	1977	5.00
1974	5.81	1978	4.92
1975	5.56	1979	4.81
1976	5.12		

Source: Banco Central

The reducing of the money supply shows not only a more controlled position of the credit market as well as a declining inflow of capital, which certainly produced an anti-inflationary effect (44).

10.3.1. Rediscount Policy

Since the Government effort was toward reducing the money supply, a more restrictive discount rate was visible during the Geisel Administration than in the previous one. The Government, as we mentioned before, maintained the policy of free course of the interest rates, while the discount rate was - restrictive - (45). Thus, the Government securities competed strongly in the period with Private papers, and Public resources were used to raise the profitability of private Stocks.

Although implementing this policy of calming down the level of the investments, the Government avoided to adopt a policy of an open import restriction or even a more controlled mechanism as some of those which existed in the forties or in the fifties (46). On the assumption that the Government had used some additional control on imports than the current objective ceiling imposed by the amount of available exchange values, the probable result should be the reduction of inputs to the leading corporations with a consequent shift to import substitution. Of course, these big corporations were coming into a position of adapting to some degree of import substitution, once the resources abroad to finance the trade gap were becoming expensive and more scarce (47).

The strong expansion of the domestic steel production, promoted and obtained during a short period (1973-1977) showed that more rapid growth was presenting an excessive cost, and the waste of resources was an important item in the economic debate (48). While the more tight rediscount policy can be interpreted as a mechanism to reduce investments and cut the indebtedness abroad, the Government itself was pumping in massive resources to expand State-controlled sectors and thus trying to reduce the structural maladjustments which were pushing inflation further (49).

10.3.2. The Evolution of Exchange Reserves and Money Expansion

The apparent reason for the mounting debt of the country was the easiness which the Government and the Private Sector found abroad to operate transactions with Eurodollars and Petrodollars (50). The Financial houses grew like mushrooms after the so-called oil crisis, and considerable resources were available at floating rates. Of course, the Brazilian Authorities considered those rates as favourable, since they preferred to expect lower capital costs in the future (51).

Thus, the balance of payments' position could show surpluses of 1,2 billion U.S. dollars in 1976, 0.6 billion in 1977, 3,9 billion in 1978 since these results were following the historical trend for indebtedness and not expressing a change of position of the domestic economy in the international market (52).

The policy of gross borrowing on commercial terms allowed the Government to constitute the traditional surplus of exchange resources in need for a free trade position in the Brazilian foreign trade, while they simply did not contribute to reduce the stronger demands for capital goods and intermediate inputs from abroad. Thus, the current policy of devaluations was maintained to reduce the domestic demand abroad, while promoting rising prices and inflation (53).

As we mentioned before, the Geisel Administration did not present a uniform concept on the adequate mixes of economic policies. This point was important also in relation to the borrowing policy abroad, once the Governments of the MDC were generally adopting in the period restrictive measures to adjust in front of the depression. These policies abroad, especially as a MDC policy, should have to be of a decisive effect to push upward the interest rates in the international

market, a phenomenon which partially explains the easy-borrowing policy of the financial houses (54). A severe domestic adjustment to HOC policies should certainly have to be one more adequate decision in the premise of growing domestic liberalization and internationalization. (55)

Basic Interest Rates:

31 Dec	Prime (City Bank)	LIBOR (six months)	Banker's Acceptances(six months)
1976	6 1/4	5 3/8	4 3/4
1977	7 3/4	7 5/8	6 3/4
1978	11 3/4	12 1/2	11 1/2
1979	15	14 3/4	14

This almost 3-fold expansion in the cost of capital in only 4 years shows that the policy adopted by the Brazilian Government ignored the real circumstances of the world depression, and thus the Government intended to go through this crisis with only partial measures to face it.

High interest rates, while the Government was boosting of making deflationary measures were less understandable, since they contributed - even in the current Government philosophy - to feed the demand of inflation which Public Authorities were supposed to be combating against. High interest rates on demanded inflows, should have to require (a) corrective inflation through devaluations and (b) long run inflation through excessive capital cost. We see thus why we cannot consider as sincere the claimed Government effort to combat inflation.

10.3.3. Public Finance Policies

Under the conditions of the so-called oil crisis, and consequently due to overall raises in prices to consumer, the Government, allegedly to reduce demand, expanded a great deal the indirect taxes, which were thus available to raise the Public expenditures. This policy was considered to express a midway between the "shock treatment" and a "lagging gradualism" (56). The resources obtained by the taxation system were therefore used to implement a sustained level of Public spending, and these expenditures were adjusted to the targets of the business squeeze promoted by the Government. This fact was interpreted as if the Government committedly squeezed the domestic Private Sector and benefitted the FME and the State Sector (57).

In fact, the Public Sector (Government, Public corporations and local authorities) dissaved in the period, following the State indebtedness abroad in a rythm quite similar to that of the Private Sector. While the Government spending had a positive effect on the Private Sector, supporting the anti-recessive forces in the economy, it contributed to additional mobility in the flow-of-funds and, consequently, to money issues (58). Since the time and savings deposits followed the increase during this Administration it is difficult to state, this increased Public expenditure, as an erroneous policy because it certainly promoted some basic demand. But some leaders in the Private Sector attributed a mi-

nor emphasis to this aspect, considering that the expansion of the State-owned corporations were penetrating in areas before attributed to the Private activities and basically acting as profit-seeking corporations (59). This interpretation, of course, was forgetting the role performed by the Public corporations during the previous Administration (60).

A reason why Government Authorities followed the squeezing credit creation by banks was the then-current interpretation they made of credit creation by the banks as the leading component on the expansion of money supply. The Public Authorities firstly intended also to reduce the major role of Public credit to agriculture, but the unfavourable development in this sector in the years 1977-1978 led to the maintenance of the level of Public support to agriculture's operation and commercialization (61).

10.4. The Agricultural Performance

In fact, the Public policy to expand agriculture was attempting to make this sector react on the basis of small amounts of resources: (a) sustained minimal prices; (b) oriented credit to feed demand for industrial output; (c) low wages.

The minimum prices assured by the Government to the purchasing of agricultural commodities was adjusted during all this period under the official general level of prices (62). According to this mechanism, while agriculture was impeded to collapse, the cost of inflation had continuously to be absorbed also in this sector, acted the expansion of output as an anti-inflationary effect. This specific squeeze was also favourable to the industrial inputs of agricultural origin, which thus avoided to pass back to the manufacturing sector some of the inflationary effects previously incorporated in the industrial goods consumed by agriculture (63).

The relatively large credit to the purchase of industrial equipment to agricultural use was also contributing to expand the industrial supply and thus avoiding an excessive "down-warning" in the manufacturing of durables (especially automotive) and machine tools. This credit was of inflationary nature, since the Government applied to it negative rates of interest, when considered in real terms (64). Thus, this policy was an important element of sectoral income reallocation, since these resources transferred to agriculture had to be payed by some other economic sector.

Finally, the policy of general low wage rate to unskilled labour was here highly favourable to agricultural demand for manpower, once the warning down of manufacturing activities and civil construction reduced the pressure on the rural labour, which was also previously demanded by other branches.

Thus, the Government assumption was that agriculture could react to these policies in a sufficient extent to expand and thus attract additional resources in the market. The current mechanisms of fiscal investment were also maintained in order to increase the opportunities of the agricultural sector to gather resources from the big industrial corporations. This Government policy

seemed to be successful in the period, once the formation of conglomerates comprising both manufacturing and agricultural enterprises increased a great deal in the late seventies (65).

The total demand for agricultural traction machines expanded at a rate of 6.5 per cent per year in the period 1973—1979. Since we observe the fact that the agricultural return was decreasing in real terms also in this period, the Government credit may have played an important role in this expansion of demand for machines (66).

Table 10.2.

Government Subsidizing of Rural Credit (In Percentage)				
Years	Terms of Trade Ag x M.	Average Variation of Gen. Price Ind.	Average Rate of Interest of Agric. Op. Costing	Subsidizing Rate
(1)	(2)	(3)	(4)	(5)
1977=100				(5)=(3)-(4)
1970	61.8	20.0	15.0	5.0
1971	67.3	20.3	15.0	5.3
1972	70.7	17.3	15.0	2.3
1973	79.0	14.9	15.0	-0.1
1974	67.5	28.7	15.0	13.7
1975	60.9	27.9	15.0	12.9
1976	70.0	41.2	15.0	26.2
1977	100.0	42.7	15.0	27.7
1978	89.6	38.7	15.0	23.7
1979	84.1	53.9	15.0	38.9
1980	72.8	100.2	33.0	67.2
1981	59.8	109.9	45.0	64.9

Source: Data: FGV

Table: A. V. Primo (67)

When comparing columns (2) and (6) in the above table, we see that nominal money is injected into the agricultural sector apparently as a movement to compensate the unfavourable trend of terms of trade between agriculture and manufacturing industries. In the period 1970-73, when the trend was favourable to the terms of trade, there was also a decreasing rate of subsidizing. Conversely, in the period that follows the first one, unfavourable terms of trade as trend for agriculture corresponded to increases in the rate of subsidizing (68). This structural behaviour seems to indicate inflation as a leakage factor on the agricultural sector (69).

The Government policy of inducing the inflationary effects also to be

absorbed by the agricultural activities, while implying in the short run an anti-inflationary device, contributed in the long run to de-capitalized agricultural activities, once this sector become more and more dependent of the subsidized operational credits, as well as reduced its own investment capacity.

Table 10.3.

Banco do Brasil. (computed from nominal cruzeiros values) Credit to Agricultural Activities. (In Percentage)				
Year (1)	Op. Costing (2)	Investment (3)	Commercialization (4)	Total (5)
1971	52.8	35.7	11.5	100
1972	48.9	39.2	11.9	100
1973	49.3	38.6	12.1	100
1974	53.4	33.6	13.0	100
1975	50.8	32.0	17.2	100
1976	51.6	32.4	16.0	100
1977	58.5	24.1	17.4	100
1978	60.3	26.7	13.0	100
1979	63.1	25.8	11.1	100
1980	68.7	16.1	15.2	100
1981	63.2	13.7	23.1	100

Source: DEPEB

When observing the above table, we see that production and commercialization were rising their slices in the period, while investment financing was going down. This information, combined with columns (2) and (6) from table 10.2. clearly indicates that the expansion of subsidies to the agricultural sector, a phenomenon which was induced by worsened terms of trade with manufacturing sector and inflation, was also combined with a decreasing financing of investments in primary activities (agriculture).

Thus, it seems reasonable, our supposition, that expansion of subsidizing rates to agricultural activities, as well as the need for agriculture to absorb the inflationary effects in the economy, were contributing in long run terms to de-capitalize Brazilian agriculture. It is also clear that this de-capitalization we refer to was a relative phenomenon, which cannot be determined in absolute terms, due to the visible growth process in the period. This structural change can be interpreted as a State inducement in the changes of the relative demand (70).

As we see in table 10.4. the demand for agricultural tractors and cultivators expressed in the period a sustained capitalization of the agricultural activities, while the relative pace of this growth can be interpreted as negative when compared with the capitalization of the manufacturing sector (71).

Table 10.4.

Total Sales of Agricultural Traction Vehicles. (Un.)				
Years	Motorized Cultivator	4-wheeled Machines	Sprocket- -wheeled Tractors	Total
(1)	(2)	(3)	(4)	(5)
1972	2,619	29,890	1,419	33,928
1973	2,867	39,840	1,957	44,664
1974	3,428	46,890	2,548	52,866
1975	3,164	58,580	3,791	65,535
1976	2,937	64,248	4,763	71,948
1977	2,876	53,152	3,453	59,481
1978	4,067	47,753	2,626	54,446
1979	6,358	56,786	3,662	66,806
1980	6,563	58,737	4,181	69,481
1981	4,903	38,177	2,790	45,870
1982	5,216	30,901	1,832	37,949

Source: ANFAVEA

10.5. The Position of the Balance of Payments

By the policy of indebtedness abroad we mentioned previously, the Brazilian foreign trade imbalances were covered in a scale sufficient to display final positive results in the balance of payments. These manipulations in the structural position of the accounts were stimulating the inflationary effects, as we have explained, in the economy. The inflow of short-term capital contributed to off-set the current account deficit, but acted conversely as a source of speculation in the transactions in the domestic stock market.

Thus, the Geisel Administration, under the pressure of an array of circumstances, followed the previous indebtedness policies, expanding even its scale in an unpreceding way (72). Despite this strong indebtedness, the balance of payments showed negative reserves' result in the years at the end of our period in study, 1979 and 1980. This result showed thus the practical impossibility of financing expansive policies in a sustained way by means of external resources, and pointed to the structural and, consequently, non-normative character of the Brazilian foreign trade. The fluctuations in the Brazilian foreign trade in this historical period characterized by post-1964 economic policies were not different in nature from the previous fluctuations which promoted or engendered barriers to the Brazilian development (in the anterior phase of import-substitution policies). A detailed analysis of the Brazilian foreign trade shows that Brazil was submitted to a broad set of forces, which cannot be ruled from Brazil to the outside, but commands Brazil's economy from the outside.

The Government option for a deep indebtedness abroad in order to promote continuous liberalization had thus presented a probable effect of simply postponing the particular Brazilian shortcomings to balanced growth. With the progress of liberalization, especially in Silva and Medici Administrations, the capital transactions became more and more accelerated, stimulating speculation and excessive imports, phenomena which were supposed to be counterworked by the liberalization policies.

The Public effort to achieve more rapid growth with raising exports conducted certainly to this strong reliance on external factors, reducing the domestic control on basic elements of economic policy-making (73). Thus, additional imbalances can be attributed to this policy which consider all economic components under full control since the Government determines the rate of investment.

The artificial evolution of the balance of payments under post-1964 type of economic mixes must therefore be interpreted as a result of the Government attempt to promote the expansion of income and output without redistributive policies. This premise had in fact been on the basis of the indebtedness policy each time that Government officers came to the public to explain the adopted policies (74).

When we consider the point-of-view expressed in the preceding paragraphs, we can better understand why the Geisel Administration followed the basic lines previously established, and avoided the recession which was in need in the late 1973 and early 1974, adopting, instead of a "shock treatment", a midway to "gradualism" which lasted during all this Administration (75). The Brazilian Authorities considered the "bottlenecks" of the Brazilian economy as existing exclusively abroad, and the resources gathered abroad should thus compensate for this "unwillingness" that the international market was expressing to absorb Brazilian commodities (76).

Geisel himself expressed his own confusion when he said to the press: "Everything is in the correct place, but nothing is functioning..." (77). An analysis of these difficulties shows that the economy was following a course of liberalization in excess to the domestic capacity of production, and the continuous failure in the competition abroad was being covered by capital imports.

Thus, when the position of the balance of payments showed two subsequent years in a negative position, we can interpret this as how exhausted the conditions of capital imports were, which characterized this period. Now an effective effort should have to be promoted through re-ordering the Brazilian foreign trade, if a new expansion should be desired after this new squeeze.

10.6. An Interpretation

After 1978 a new Administration was responsible for the Government action. This was led by President Figueiredo, former Head of Intelligence during the Geisel Administration. With Figueiredo Administration, Delfim Netto was back as the responsible Minister for Brazilian economic policies. Since Delfim Netto

is generally less committed to business squeeze than Campos or Simonsen, Ministers who were the main personalities in the economic policies during, respectively, Castelo and Geisel Administrations, the line promoted in the first years of Figueiredo Administration followed a milder pattern, quite similar to the mix we mentioned that Simonsen was gradually adopting in the late seventies.

It seems to be that the Ministers responsible for the Government economic policies were quite aware of the more and more sluggish responsiveness the domestic economy was presenting to Government policies (78). This phenomenon was characteristic of the two last referred Administrations, Geisel and Figueiredo (still in office). The comparatively milder policy adopted up to the eighties was later on abandoned due to a deep exchange crisis. In the late seventies, the economic policies can thus be interpreted as of postponing the crisis and promoting expansion in preferential activities or sectors (79). Thus, the adopted policies can be characterized roughly as the "gradualism", once they intended to combine (a) successive liberalization with (b) stable investments.

As we mentioned before, the purpose of the Geisel Administration was to promote a Ten-Year Plan, which presented a two-digit figure as the potential rate of growth. This plan, thus, emphasized considerably the role of external resources (80). It was assumed that external resources should be available in a growing amount in the subsequent period, and these resources would stimulate the expansion of exports at a rate sufficiently high to pay back the borrowed resources and finance domestic growth. Although the Geisel Administration, under the pressure of excessive imports and the so-called oil crisis abandoned this prospective plan, its character showed how optimistic the view of the Brazilian Public Authorities was and how far this vision was from the real course followed by the events in the period.

A question would arise why the Government insisted in a free developmental course for foreign trade and avoided a stronger use of exchange budgets, import ceilings, etc. The adequate answer seems to be that Governmental Authorities were fully convinced of the favourable developments of liberalization, since this strategy promoted capital inflows and squeezed less capital-endowed corporations. Despite the recessive character of the international juncture in connection with the "oil-crisis", the Government Authorities remained in their expectations that the situation would suddenly turn in a favourable way, and this position produced the policy we classified as a mix of monetary control and credit expansion to particular corporations.

There were thus some persistent traces which characterized this last period of our study (1973-1980): shortage of capital, more acute fluctuations in the economy, rising prices and inflation, slowdown in the expansion of fixed capital, excess competition due to the precocious liberalization, excess imports, and dualism in the modern sector. Let us present a short interpretation of these issues:

A) Shortage of Capital. As we observed, this phenomenon resulted from both (a) excessive emphasis on capital composition of final output and (b) persistent

imbalance in Brazilian foreign trade. The emphasis that Government Authorities had persistently presented on the introduction of technical innovations, as well as highly costly infrastructural works to extend facilities to automobile expansion and industrialization, proved to be in the long run consuming tremendous amounts of exchange values. To give an example, only a big hydroelectrical Government-owned complex, is costing as much (Itaipú) as 15 of the most advanced type of Swedish nuclear plants (81). These massive investments, which are connected with a Public policy of persistent struggle for a more rapid growth, not only consumed the resources which can be produced by a stagnant Brazilian foreign trade (in relative expression) as well as eventual inflows. The main instrument the Authorities have used in the period to counter the capital shortage was a continuous policy of devaluations, which certainly, after a given point, became less effective in attracting capital inflows and accelerate the imbalances in the Public budget, foreign trade and balance of payments (82). The result was an impressive expansion of the country's debt.

B) Inflation, Fluctuations and Rising Prices.

The unstable type of equilibrium promoted by the Brazilian Authorities, while expanding the Brazilian total capacity of payments abroad through capital inflows, resulted in the long run in a gradual loss of control of the monetary parameters, with inflation, fluctuations and rising prices. The Government intended to counter these phenomena through stagnant wage rates, monetary policy changes and relaxed fiscal measures, without substantial results. Thus, inflation becomes gradually, in the period, an instrument of income reallocations and Public budget financing, with expressive recessionary pressure and loss of efficiency. (83)

C) Excess Imports and Excess Liberalization.

Imports, when viewed as a leakage, may fluctuate both in response of two elements: (a) the general level of domestic output and (b) in response to changes in the relationship of domestic and external prices. If the prices of inputs abroad fell or are artificially held down, then it may be advantageous for domestic producers to use such inputs, instead of buying or producing them at home, at a rising price. The obvious effect should then be the increase in the volume of imports, a phenomenon which is generally accompanied by increases in their values (84). Thus, the immediate consequence might be a reduced concern for the expansion of an eventual productive capacity of producing similar commodities of those importable at home. The result of this option in the middle run may correspond to a downward move on the side of the domestic low competitive producer. Moreover, the depressive movement resulting from imports must be compensated by increases in exports, once this move should help to re-establish the trade balance in a later momentum. The balance of trade and payments may become thus a vital item, especially when a country must import several commodities which are not conveniently produced at home.

In the absence of this periodic equilibrium, the local economy became submitted to strong fluctuations, and these fluctuations may contribute to additional disequilibrium and even loss of control on the main market components.

Imports, when viewed as an injection, may be decisive to accomplish the output at lower costs and thus improving the domestic supply and exports. Thus, there must also be a point of equilibrium, where occasional advantages cease to operate favourably to increases or decreases in imports.

The world market conditions were favourable to trade expansion of the Brazilian commodities in the period 1967—1973. The year of 1967 was somewhat disturbed by the Suez incident and raises in transportation costs (85). The subsequent period, stimulated by a growing demand due to the war in Asia's Southeastern Region, was favourable to the trade of Brazilian commodities, yet, disturbed a little by U.S. currency crisis in the second half of 1971, which provoked generalized devaluation of hard currencies and, consequently, worsened terms of trade to the Third World countries (86).

Under the previous peculiarities we referred to before, Brazil was able to expand its trade abroad, while a less adequate use of the gains of trade was promoted, due to the Brazilian absence of a contracyclical economic policy (87). The improvement in the export position was followed by the expansion of imports at rates greater than the exports' rates (88), characterizing thus the case of excess imports, and reducing the country's capacity to pay back the capital inflows which were coming to operate in the Brazilian economy.

During the international recessive period characterized by the so-called oil-crisis, the position of the Brazilian foreign trade deteriorated accordingly, although the total capacity of payments abroad remained expanding due to inflows, mostly borrowed at floating rates (89). This more than unproportional developments in the Brazilian foreign trade and in the balance of payments resulted simultaneously in fluctuations, inflation, partial squeezes and finally in an exchange crisis, which became converted into an economic recession in the early eighties (90).

The main weapon with which the Government Authorities used to counter the excess imports was the policy of mini-devaluations (91). The Government avoided an effective use of imports control, exchange budgets, multiple exchange rates, etc. in order to press down the level of imports. As a result of this excessive liberalization policy, the Government was more and more depending on borrowed resources in foreign currencies to operate the expansive policies of industrialization and export promotion (92).

The opposite argument could be explained, i.e. that the liberalization policy, as introduced by the Brazilian Government, was not deep enough and consequent. as to push out of the market the expensive domestic industries (93). The fact is that countries which followed a stronger liberalization, can today present a worse economic position than Brazil's, while others which avoided excess liberalization or adopted gradual liberalization have also found more easily a position to control their foreign trades and balance of payments (94). It seems to be reasonable to accept the experience of other countries in their positive aspect. Several countries experienced liberalization in very defined and gradual phases, without abandoning its combination with import-substitution policies (95).

The adoption of this gradual position would certainly not be bizarre (96).

D) Slowdown in the Expansion of Fixed Capital.

The Government policies to create more demand and promote investment during this period suffered from the heritage of the previous business squeeze. The private Sector joined the upswing through the activation of extensive unused capacity, and the expansion of the fixed capital was relatively small, when compared with the resources applied in commodities speculation, conspicuous consumption and real estate (97). The tardiness of more larger private investment expenditures contrasts thus with the strong State investments in the expansion of infrastructure. The position of the Private Sector can be partially explained by the fact that in this period the demand expanded more for housing and durables, and these branches had a relatively concentrated structure and extensive unused capacity previously accumulated. When the unused capacity became reduced to a minimum, then the economy entered into shortages stimulating consequently the imports.

Thus, the massive expansion of investments which characterized 1972-1973, coincided with the exchange squeeze and the "oil crisis", creating oscillations in the investment capacity due to the scarcity of exchange values.

E) Dual Structure in the Modern Sector.

The strong land concentration promoted after the change of régime, as well as the existence of a network of communications which characterized a nationwide market, contributed much to accelerate the internal migrations in the late sixties and early seventies (98). The years at boom of 1972 and 1973 generated an effect on the movement of labour, which was not promptly calmed down by the more moderate expansive policy adopted in the Geisel and Figueiredo Administrations. Thus, as a result of the above mentioned migrations, the urban areas became crowded, with a strong pressure to additional investments in Public services job creation, housing, etc. The expansion of the economy, which have been promoted mainly with basis on capital consumption features, was not requiring expansive amounts of labour, as was offered by the early labour supply to the market (99). This less pronounced labour absorption in the urban sector contributed to the formation of a dual labour market in this sector, which is closely connected with the modernization process (100). The pre-modern, small business remained in a function of use of intensive labour, influencing thus to more larger wage differentials. Despite the importance of these industries in the expansion of the economies of scale in the big corporations, the Government is still lacking a specific policy to improve competition abroad through the use of this dual market position (101).

We see, therefore, the fact that during Geisel and Figueiredo Administrations the relative advantages of an artificially expanded power to grow were apparently overcome by the new developments in the international economy. In order to adjust to these factors, the Brazilian Government once again made use of palliative measures, as an increased borrowing abroad, inflationary financing, etc. The major weapon of fiscal policy was once again avoided by the Public Au-

thorities and both internal and external equilibria were demanded only through monetary measures. This policy, while perverse and contributing to income concentration, revealed also in this period less effective than in the previous downswing of 1965—1967, certainly due to the fact that the international juncture was now less favourable to a developing country as Brazil than the previous juncture (1967-73) had been.

REFERENCES.

- (1) G. M. Meier "Export Substitution and Multinational Enterprises", in "Employment, Income Distribution and Development Strategy", Problems of Developing Countries, Ed. by A. Cairncross and M. Puri, "Essays in Honour of H. W. Singer", London, 1976 pp.140.
- (2) See Conjuntura Economica, Jan. 1975 and Feb. 1975.
- (3) See Conjuntura Economica, FGV, Jun. 1974.
- (4) See "Boletim do Banco Central", Feb. 1975, pp.97. See also reports of the respective Departamento Economico, Banco Central. See "Contas Nacionais", FGV.
- (5) See M.H. Simonsen and Roberto de O. Campos, "A Nova Economia Brasileira", BEx, RJ, 1975, and also Carlos G. Langoni, "A Economia da Transformação", BEx, RJ, 1976. See also "Conquistas de Uma Década", Gen João Baptista Peixoto, BEx, RJ, 1975. See Carlos G. Langoni, "Distribuição de Renda e Desenvolvimento Economico no Brasil", RJ, 1973. See also Earnane Galveas, "Brasil: Fronteira do Desenvolvimento", RJ, APEC, 1974.
- (6) See Edmar Bacha and Claire Savit, "Os Novos Incentivos á Exportação e a Logica do Modelo Brasileiro ", RJ, 1975.
- (7) See Conjuntura Economica, Jan. and Feb. 1974, 1975.
- (8) See E. Bacha, "Crescimento Economico Brasileiro Recente e Alguns de Seus Principais Problemas", RJ, 1975.
- (9) See "Apresentação do Plano Decenal", Secretaria de Planejamento da Presidencia da República, Brasília, 1974.
- (10) See Dionisio C. Netto, "A Política Economica do Governo nos Meados dos Anos Setenta", RJ, 1977, mimeo.
- (11) See "A Economia Brasileira e Suas Perspectivas", Jun. 1973, RJ.
- (12) According to Paul Singer, "Crise, Só do Milagre", 1976, May, SP and also M. do Amorim Netto, "Não revitalizar a liquidez", Jun. 1976.
- (13) See C. G. de Bulhões, "Poupança e Liquidez das Empresas", RJ, 1974.
- (14) See M. de Amorim Netto, interview to Visão, Jul. 1977.
- (15) See R. Saturnino Braga, "Controlar as Importações e Mudar o Modelo", RJ, 1975, mimeo.
- (16) See Dércio G. Munhoz, "Evolução da Conjuntura", Un. Brasília, 1975, mimeo.
- (17) See General Price Index of FGV, Conjuntura Economica, several numbers, 1973-1975.
- (18) See the values in any Brazilian discrimination of these years of trade:

- the oil items jumped from US 2.7 per barrel in 1973 to US 9.8, producing an expansion of 4.29-fold in this price item to 1974.
- (19) See reports of Banco Central, Departamento Economico, in the period, 1974-75.
- (20) See Conjuntura Economica FGV, Feb. 1975. See also Anuário Estatístico, FIBGE, in the period.
- (21) See Alésio V. Primo, "O Problema da Capitalização Rural", Departamento de Crédito Rural, Banco do Brasil, 1982. See also P.R. Vianna, interview, Jun. 1977.
- (22) As a gradualist, Simonsen is generally considered to be more close to orthodox views than Delfim Netto.
- (23) See interviews of Claudio Bardella and P. Villares on the strikes of Oct. 1974 and 1975, with especial attention to metallurgical unions in São Paulo. Several newspapers and magazines.
- (24) See Conjuntura Economica, FGV, Jan. and Feb. 1974, 1975.
- (25) See Paul I. Singer, "Crise...", op. cit., SP, 1976.
- (26) See exposition of the Ministers Reis Velloso and Mario H. Simonsen to I.S.C. (High Army School) Jun. and Jul., 1977.
- (27) Minister Simonsen accepted the hypothesis of Government applied import-substitution policies, in an indirect answer to the proposal of Saturnino Braga, while Reis Velloso considered this hypothesis as "socialization of the immiseration".
- (28) According to proposal of the Minister of Agriculture and declarations of Minister Simonsen in late 1976 and early in 1977.
- (29) See Cláudio Salm, "Desaceleração Indiscriminada", RJ, 1976, mimeo.
- (30) See Luis de Mello Belluzzo, interview to magazine Visão, Jul. 1977.
- (31) See Eduardo Suplicy, "Problemas Estruturais da Economia Brasileira Atual", 1976, and also interview to magazine Visão, Jun. 1977.
- (32) See E. Bacha, "O Modelo Brasileiro", RJ, 1975 and also Frederico Robalinho, "Redução de Crédito às Pequenas e Médias Empresas", 1977, CEBRAE.
- (33) See L. Gonzaga Belluzzo, "Demanda Declinante", UNICAMP, 1977.
- (34) See "Síntese Econômica", ANEP, Jun. 1977.
- (35) See Conjuntura Economica, FGV, several numbers, period 1974-1980.
- (36) According to Eduardo Suplicy, "Inflação e Desequilíbrio no Balanço de Pagamentos", RJ, 1977.
- (37) See Affonso C. Pastore, "Aspectos da Política Monetária Recente no Brasil", in Estudos Econômicos, vol 3, 1973, pp. 7-58.
- (38) See Affonso C. Pastore, "A Oferta de Moeda no Brasil", in Pesquisa e Planejamento. vol 3, Dec. 1973.
- (39) See Ruy Miller Paiva, inter alia, "O Setor Agrícola no Brasil: Comportamento Econômico, Problemas e Possibilidades", S.A.E.S.P., SP, 1973. See also Paulo R. Vianna, "Análise da Política do Crescimento do Governo", 1977.
- (40) See Roberto Campos, "Corrigindo o Voo", interview, 1977.
- (41) See R. Saturnino Braga, "Proposta para Mudança do Modelo Econômico Brasileiro", MDB, RJ, 1976.
- (42) See Eduardo Suplicy, "Problemas Estruturais ...", op. cit.

- (43) See L.A. de Oliveira Lima, "Por Um Novo Modelo Economico", RJ, 1978, mimeo.
- (44) See report of Banco Central, Departamento Economico, several issues of the period 1974—1980.
- (45) See Reports of Banco do Brasil in the period: 1974—1979.
- (46) See R. Saturnino Braga, "Proposta..." op. cit.
- (47) See C. Estevam, "Privatização das Empresas do Governo", in "Simpósio o Estado e Economia no Brasil (SEEB)", SP, CEBRAP, 1977.
- (48) See Francisco de Oliveira, "O Estado nas Economias Dependentes", in SEEB, SP, CEBRAP, 1977.
- (49) See Luciano Coutinho, "O Setor Produtivo Estatal na Economia Brasileira", in SEEB, SP, CEBRAP, 1977.
- (50) See International Finance Statistics and International Finance Corporation reports. See also reports of Banco Central and Banco do Brasil in the period.
- (51) See Boletim Economico, Banco Central, several issues in the period.
- (52) See Departamento Economico reports, Banco Central, several issues.
- (53) See Report of Banco do Brasil, issues of 1974—1980. See also "Indicador", Revista Exame, period 1974—1980.
- (54) See on the issue L.A. de Oliveira Lima, "Por um Novo...", op. cit.
- (55) See Otávio G. de Bulhões, "Inflação de Crédito e Endividamento", interview, mimeo, 1977. See also Carlos Langoni, "Gradualismo Consistente e Estabilidade de Índices", interview, mimeo, 1977.
- (56) See M. Amorim Netto, interviews, Jun. and Jul., 1977.
- (57) See L.A. de Oliveira Lima, "Perversões do Modelo Brasileiro Atual de Desenvolvimento", mimeo, 1978.
- (58) See D. Garcia Munhoz, "Evolução Imprevisível de Preços", interview, Brasília, Oct. 1977.
- (59) See H. Maksoud, several articles in Visão, period 1976—1980.
- (60) We refer to the indirect subsidies which were constituted by cheap under-priced inputs to the expansive durables-producing industries and the Private Sector in general in the period 1968—1973. See also Cláudio Salm and Francisco de Oliveira papers.
- (61) See Paulo R. Vianna interpretation as member of agricultural pricing council: interviews, Visão, Jun. and Jul., 1977; Apr. 1978.
- (62) See Paulo R. Vianna, previous reference and also "Gazeta Mercantil, several issues, period 1976—1980.
- (63) According to M.H. Simonsen, interview, Nov. 1977.
- (64) See reports of Banco do Brasil and Banco Central.
- (65) See Celso Furtado, "A Hegemonia..." op. cit., and "O Mito...", op. cit., as well as "Brasil Pos-...", op. cit. See also Eduardo Suplicy papers.
- (66) See AMTAVIA reports and also reports of Banco do Brasil.
- (67) See a. Vaz Primo, "O Problema da Capitalização Rural", op. cit.
- (68) See a similar interpretation of Primo and C. Salm, in previous mentioned works.

- (69) This is also the point of view of Mázio Stadler, member of National Monetary Council (CNM). Interview, 1983.
- (70) According to Oliveira Lima mentioned paper.
- (71) According to analyses of Primo, Stadler, ANFAVEA reports and Oliveira Lima.
- (72) See Banco Central review issues for the evolution of the external debt.
- (73) See João M. Cardoso de Mello, "A Crise de Realização da Produção", in SEEB, "Por Uma Crítica Teórica da Estatização", CEBRAP, mimeo, SP, 1977.
- (74) See APEC Collection, several issues, 1967--1980.
- (75) See Francisco de Oliveira, "O Estado...", in SEEB, "Por Uma Crítica Teórica da Estatização", CEBRAP, SP, 1977.
- (76) See several interviews of Minister Delfim Netto, 1979, 1980.
- (77) Interview, Aug. 1977.
- (78) See especially Estudos APPI, years 1978--1980.
- (79) According to Ernane Galveas, interview, Nov. 1982, *Jornal do Brasil*.
- (80) See Apresentação do Plano Decenal, Secretaria de Planejamento da Presidência da República, 1974.
- (81) Compared from official cost information available in both reference countries.
- (82) See João M. C. de Mello, "A Crise...", op. cit.
- (83) See Luis Gonzaga de M. Belluzzo, op.cit.
- (84) For this persistent effect in Latin American cases, see John S. de Beers, "Some Aspects of Latin America's Trade and Balance of Payments", American Economic Association, A.E.R., 1949, vol 39, pp.384-395. See also F. Pazos, "Inflation and Exchange Instability in Latin America", I.M.F., A.E.R., 1949 pp.406-414.
- (85) See Conjuntura Economica, FGV, Feb. 1968.
- (86) See Comercio Exterior de Mexico, magazine of the Banco Nacional de Comercio Exterior, Mar. 1973, "New Dollar Devaluation, Another Incident in a Long-Drawn Crisis", pp.4-6.
- (87) See C. Estevam, op. cit., See also S. Kanesathasan, "Export Instability and Contracyclical Fiscal Policy in Underdeveloped Export Economies, A Case Study of Ceylon Since 1948", in "International Monetary Fund-Staff Papers", vol VII, Apr 1959, No. 1.
- (88) See Banco Central, Banco do Brasil and CACEX information on trade in the period. See even Anuario Estatístico do Brasil, FIDGE.
- (89) See "A Economia Brasileira", report of Banco Central, Departamento Economico, especially number of June-July, 1981.
- (90) See Conjuntura Economica, numbers of Jan and Feb, period 1976--1982.
- (91) As characterized by Oliveira Lima. On the unefficacy of unilateral use of devaluations, without cooperation with fiscal policies, see Robert A. Mundell, "The Appropriate Use of Monetary and Fiscal Policy for Internal and External Stability", in "International Monetary Fund, Staff Papers", vol IX. Mar. 1962, No. 1, pp.70-79.
- (92) On Devaluation effects, see Joan Robinson, "Essays in the Theory of Employment", London, 1937, pp.183-206. See also Haberler, in *Kyklos*, 1949, vol 3. pp.201-etc. See Kachlup, *Economica*, vol VI-VII, 1939-40. See A. H. Javornick,

"National Income, Exchange Rates and the Balance of Trade", *Economica*, May 1958, pp.188-195. See also Sidney S. Alexander, "Effects of a Devaluation: A Simplified Synthesis of Elasticities and Absorption Approaches", *A.E.R.*, 1959, vol 49, pp. 22-42. See W.M. Corden, "Tariffs, Subsidies and the Terms of Trade", in *Economica*, Aug.1957. See also J.M. Fleming and Lorette Boissonneault, "Money Supply and Imports", "International Monetary Fund Staff Papers", vol.VIII, May, 1961, no.2, pp.227-240. See even: Fritz Machlup, "Liquidité Internationale et Nationale", *Bulletin d'Information et de Documentation, Banque Nationale de Belgique*, 37, pp.105-116, Feb. 1962; and Anibal Pinto, "Ni Estabilizada Ni Desarrollo: La Política del Fondo Monetario", Santiago, 1960, Chile.

(93) See Eugenio Cudin, interview, Mar. 1969; see also Roberto Campos, interview, "A Defasagem Sinistra", Aug. 1976. To an opposite point-of-view, see Hélio Beltrão, "Revolução Silenciosa", interview, Aug. 1976.

(94) To a study of the Japanese case, see: P.R. Narvekar, "The Cycle in Japan's Balance of Payments, 1955-58", "I.M.F. Staff Papers" vol VIII, Dec. 1961. No 3, pp.380-411; See also Economic Survey of Japan, 1957-1958, Tokyo, 1958, idem, 1967-1968, Tokyo, 1968. For the German and Swiss experiences on Capital liberalization see: Graeme S. Dorrance and E. Brehmer, "Controls on Capital Inflow", "I.M.F. Staff Papers", pp 427-438, vol VIII, Dec. 1961, No. 3.

(95) Aside from the Japanese example, we could refer to Italy, Spain and Belgium experiences.. The E.E.C. proceeded also to a collective import-substitution of agricultural items in the fifties and sixties, which proved to be extremely adequate. See C. Furtado, *A Nova Dependência*, RJ, 1982, and Graeme S. Dorrance, "The Effect of Inflation on Economic Development", "I.M.F. Staff Papers, vol. X, Mar. 1963, No 1, pp.1-47. As stated at page 20: "An active policy of encouraging import substitution may involve protection of domestic production from foreign competition. "...It is also possible that it will lead to the encouragement of activity which, in the absence of protection, would remain unproductive almost permanently in the face of foreign competition."

(96) See United Nations, *Economic Development of Underdeveloped Countries; Repercussions of Changes in Terms of Trade on the Economies of Countries in Process of Development*, N.Y. , Doc E/2456, 1953.

(97) See João Sayad, "Real Estate Investments and Financial Markets", in *Brazilian Economic Studies*, Nr 4, 1978, pp.21-52.

(98) See "Sinopse Estatística do Brasil", 1971, and 1981, s.p.p.r., FIBGE.

(99) As manifested by Claudio Salm, op. cit.

(100) See Hamilton C. Tolosa. "in Pesquisa e Planejamento", 3, No3. Oct. 1973, pp.585-644.

(101) On the potential availability of this policy see, on the Japanese case, Miyoei Shinohara, "Structural Changes in Japanese Economic Development" Tokyo, 1970, pp.303-372, chap.8.

11. BALANCE OF THE PERIOD 1964-1980.

11.1. Introduction

After the experience of economic growth based in substitutive industrialization, which was characteristic of the period comprised by the recovery from the 1929 crisis up to the early sixties, the country shifted its developmental policies toward stimulation of exports combined with an attempt to more rapid rates of growth.

The new prevailing official views were now orientated to promote a more selected type of expansion, based on branches which expressed the new manufacturing forces, related to the cumulative movement of the fifties. The basic assumptions behind this option were: (a) the problems of the process of growth were not resulting from a deep structural character of the Brazilian economy, but simply were the results of an inadequate orientation; (b) consequently, the capital scarcity, the trade imbalances and the substitutive industrialization were "associated failures", which could be removed by the appliance of a more intelligent policy.

The reorientation was initiated by a strong business squeeze, which was supposed to eliminate one of the most important characteristic distortions of the previous economic order: the inflation. Indeed, the business squeeze (1964-1966) reduced the inflation rates but also expanded the unused capacity of the domestic economy to levels considerable higher. The policy which promoted the squeeze was also expected to reduce the role of the State in the economic sphere, as well as attract capital from abroad through extensive liberalization. In fact, this policy produced mainly a strong capital outflow, due to the squeeze, and the subsequent expansion was based in the available unused capacity of the economy, although capital inflows rose gradually their amounts.

The new spurt was thus characterized by fluctuations in the investment structure, with strong Public investments and oscillations on the Private investments. Despite the Government expectations that the new policy of stimulating exports would completely reverse the unfavourable Brazilian foreign trade position, in the new international expansion of 1967-73, the structural imbalance remained, with only 1969 as a positive year. Thus, the Government and the Private Sector relied strongly on capital imports to attempt to counter the trade evolution, as well as expand the domestic total capacity of payments abroad. The growing costs for capital, while the international position was recessive, were connected with instability in the price of industrial goods and also oil, Brazil being as is known, the world's largest oil importer.

11.2 Public Budget and Growth

During the period 1964-1980 the Brazilian economy expanded considerably, while showing stronger business fluctuations than in the previous period of study. These fluctuations were connected with the adoption of strategies oriented to more rapid growth, which required a stronger manipulation of the investment components, and consequently more rapid shifts. In this period, the country enter-

ed a phase of rapid capital formation, associated with the expansion of petrochemical, metallurgical and transportation equipment branches. This generalized expansion of the heavy industry required from the Public Authorities massive investments, as well as improvement of the tax structure, in order to gather the resources to promote growth.

The main elements to explain the high rates of expansion in the period were: (1) expansion of the export capacity; (2) a large amount of capital inflows; (3) expansion of the investment capacity and especially the expansion of infrastructural works; (4) the borrowing on a large scale of technology from abroad; (5) the large amount of domestic savings induced and the massive Government-originated flow-of-funds.

The export capacity of the country in the period 1964-1980, grew at an average rate of 17 per cent per year in nominal dollar value, while in the same unit the imports grew at an annual rate of 19.4 per cent. Despite thus the persistence of the imbalance, the figure to export growth in nominal terms is quite impressive. The funds gathered by the exports were proportionally not as favourable as they had been 30-40 years ago, showing that the relative stagnation of foreign trade could not only be explained in terms of the domestic policies in use.

This persistent trade imbalance, associated with the Public effort to promote more rapid growth policies, conducted the country to adopt a policy of continuous liberalization, which stimulated the inflow of foreign resources. Although the Brazilian Government adopted in the period a policy of balancing the Public budget, this balance showed more to be a formal question than a well-founded decision. In fact, the Government implemented, due to the non-democratic character of the State, a system of parallel accounts, where the main manipulations resulting from the exchange budget, devaluations, foreign borrowings, etc. were avoided to become expressed in the Overall Balanced Accounting of the National Economy. Thus, what is currently presented by the Treasury Authorities as the Balance of the National Treasury is nothing but the balance of the Cash movement of the National Treasury, movements which must correspond to a less than 10 per cent figure of the really existing imbalanced position.

Thus, during this historical period, the Public Authorities followed the previous policy of issuing money, borrowing abroad, etc. to fulfill the basic domestic needs in investments and exchange demand, while boosting that this was the policy of the previous Administrations which supported import-substitution policies.

It is thus reasonable to conclude on this issue that the previous policy makers were doctrinally in a more favourable position, since they were accustomed to discuss exactly what they were doing. Albeit, post-1964 policy-makers used to express themselves in a terminology which did not correspond to the actual evidence of facts.

Taking distance of these propaganda and ideological issues, the period of 1964-1980 presented a rate of expansion of the State in the economy which did not respect any comparison with the past. The expansion of the State-owned or

controlled corporations was expanded gradually from sectors which require strong infrastructure and investments, as electric power generation with transmission-distribution, telecommunications, heavy transport, steel production etc. but also sectors which express high technologies and research as computers, hardware and aeroplanes. This expansion, of course, does not correspond to an ideological decision, but to effective needs of economic growth, which a developing country has difficulties to promote without using the direct action of the Public Authorities.

In the Brazilian case, the inexistence of a democratic order to exert some kind of control on the Public action has made this expansion of the Public sector not only more extensive but certainly less efficient. This would certainly be expressed in the General Account of the country, if this account should be available. The absence of this Brazilian General Account, does not allow the student to follow in detail the relations between the domestic money surplus and the movement of the exchange accounts, between the Public investments, the foreign debt and the credit expansion and squeezes, etc. An item per item analysis of these relationships should be desired in order to evaluate, in objective terms, the quality of the Public policies of expenditures in the period.

Although in the period, under analysis, the participation of the direct taxes in the overall Federal revenues decreased 9.2 per cent, it is clear that the main shortcomings of this period (especially after 1967) was the deficient use of fiscal policies to implement the growth of financing. Under the assumption that indirect taxes were a less strong disincentive to investments, the Government relied mostly on indirect sources, which aggravated the unequal cost for the adopted more rapid growth-policies.

11.2.1. Public Indebtedness

While the income of the top 5 per cent of income tax payers grew annually, in the period, at an average rate of 11.5 per cent in real terms, the tax payment to the Government show a comparative growth of 9.3. per cent annually. In relation to indirect taxes, in real terms, they grew at an annual rate of 6.2. per cent. It seems to be that the Government Authorities avoided to expand the direct taxes on the assumption of the general low level of income availability in the country. Despite this, the regressive character of these taxes show that they should have to be used more extensively to avoid money issue, with special reference to the period after 1971.

Another point which make the position of direct taxes less relevant in face of the control of money parameters is the policy of continuous devaluations promoted by the Government. In fact, this policy increased the monetary effects of domestic money, especially through making cheaper seasonal labour as committed by the agriculture, and raising the gains of exporters in the short run. The Government thus, in fact, was not oriented genuinely for reducing the amount of money available in the market, but only to produce a moving balanced income-redistributive effect through controlled inflation rates.

Indeed, this policy was relatively used in the period of the Medici Ad-

ministration, when the strong capital inflows exerted unrelenting pressure through money issues. Later, in the period of the Geisel Government, this policy of "indexed-controlled inflation" became an open device.

On the otherhand, the Government was in a difficult position due to the adopted liberalization and the continuous trade imbalances, mechanisms feed each other mutually since the Silva period, and by these pressures the Public Authorities could only perform massive investments, as required by more rapid growth, through indebtedness abroad.

Also in Brazil, it was a widespread trend in the period after World War II, as pointed out in chapter 6, there was a decreasing funded debt, while the floating and external debts were increasing. These changes in the structure of the Brazilian debt were thus reflecting changes in the structure of international financial markets and allocation of interest rates. The floating debt, considered as comprising the outstanding volume of National Treasury bills and other advanced papers reflect, as mentioned, in part the exchange special accounts movements, and in another part the Cash position of the National Treasury.

Given the fact that the Brazilian Government decided to produce a balanced situation in the Government budget position without reflecting it on the true situation of the Brazilian General account, a considerable importance was then attributed to the use of the floating debt, as a domestic component, to equalize the Government budget. As a result of this, the importance of external debt and other unfunded debts in foreign currencies increased much. The Government could issue bills to gather the needed resources and through this Public indebtedness avoid fiscal measures and additional money issue. The movement in the position of the open market could thus perform as a device to control the demand for money and to condition the evolution of credit.

Finally, the external debt, as well as unfunded debts in foreign currency, came to constitute the main source of resource in hard currency to convert into reality the expanded domestic credit, through expanded total capacity of Brazilian payments abroad.

A considerable part of the gathered resources abroad (roughly 2/3) remained in the hands of the Public Authorities to drive the main expansive State-oriented projects. Thus, it is easy to understand why in the period the total investment was so extensively commanded and computed by Public investment (roughly 80 per cent of the investment in the period was originated in Public funds).

11.2.2. An Interpretation

The persistent expansion of the State-owned or controlled sector, which was initiated in the late thirties, with reference to economic productive activities, was not eliminated, as intended by post-1964 Governments. Although the supposition of the forces which opposed the State economic expansion presented this fact as a result of wrong policies, the State-controlled economy progressed throughout the world, as a demand of new international developments. In this sense, Brazil could difficultly be an exception. In U.S.A., Japan and Europe the

State became in this historical period (1964-1980) more and more involved with economic action, not only as a regulator of the business cycles but also as a producer, as in the United Kingdom, Italy, France, etc. The bulk of the investments which are required to make expansion or appear in some basic activities, as electricity and railways, etc. require that in developing economies the investment and administration of these activities tend to be publicly owned.

In the conditions where a more rapid pace of growth is demanded by the Public Authorities, as has been the case in the recent years of Brazilian economic growth, the fluctuation became extensive and an expanded action was required by the Public Authorities. This originated a situation which has been interpreted in different studies as the 'State market', the 'State bourgeoisie' or 'State-entrepreneur', etc. Whichever the interpretation, the mixed economy developed much in Brazil in the recent period, under the paradoxical demand of a more free market developmental course.

Despite the strong criticism made of the structuralist views of CEPAL-ECLA and ISEB type, which in the past openly supported the State intervention and continuous action in the economy of developing countries, the orthodox schools, which prevailed in the post-1964 period of Brazil, did not make an approach which reduced the State participation. In fact, under these views the State expanded in an unprecedented scale into the Brazilian economy, carrying the criticism of a "bizarre structuralism".

The industrialization drive of the State was made basically from indebtedness. Money issuing, securities issuing, external deficits have been the main tool to assure these resources. In order to cover the external deficits, the Government implemented the expansion of the foreign debt, producing thus a costly capital inflow.

Finally, while the Government Authorities promoted collecting of the direct taxes in a more persistent way than before in this period, the indirect taxes remained the main source of the Public receipts. In this sense, it can be interpreted that the Brazilian Authorities avoided in this period the use of an efficient fiscal policy, while only using monetary policies to adjust the domestic income structure. This policy showed to be not only inefficient but also to be a policy directed to achieve income concentration. The same interpretation can be made of the Public debt, which is a tool to produce an unfortunate redistribution of income where, as explained by the historian Werneck Sodré, the "losses are socialized".

Thus, when attempting to resume the characteristic conditions of industrialization-cum-exports mechanism, the State debt or National debt is an important explanatory component: therefore, we included it as the condition under (6). (1) An undervalued cruzeiro (a low exchange value of the cruzeiro). - This condition has been publicly recognized by different Finance Ministers of post-1964 Administrations, as Delfim Netto and Mario H. Simonsen. An undervalued cruzeiro is a per se condition for these policy-makers, when in reference to the gains of the exporters and the expansion of Brazilian foreign trade abroad. This undervalued

cruzeiro . . . compensated by the low price of domestic goods and services the inadequate productivity existing at home. Since the undervalued cruzeiro is maintained as the main anti-barrier for exports growth, the resulting effect is the decreasing value of the domestic labour, and consequently of labour-intensive commodities. This operates in the domestic economy as a "boomerang" effect, once the exporters try to rise the capital composition of their exportable commodities, through **more** intensive capitalization. The demand for a higher capital composition is also produced by the expansion of the exportable output and , consequently, the need for exporters to rationalize as much as possible the production of these commodities.

Successive devaluations of the domestic currency, while necessary to adjust the domestic market to the markets abroad, is less desirable when it is used as excessive liberalization, carrying thus to: indebtedness, exchange values scarcity, excess outflow of (exchangeable) currency, speculation, etc. When the exchange rate is lowered, domestic goods will become cheaper for foreign demanders and the exports will be stimulated as a consequence. However, the permanent reliance on this "Columbus egg" certainly produced the demoralization of the domestic labour to productive operations, which will produce a **minor amount** of hard currency, when sold. In this condition, devaluations not only limit monetarily potential imports but also increased demand for more imports, which will become substitutive of similar domestic production.

In order to avoid the mutual favourable effect of devaluations both to exporter and importer, it should be necessary to follow up with the policy of import substitution. Under the conditions of a LDC this is considerably more difficult due to the fact that exporters and importers are closely associated (often they constitute the same trade companies). The benefits of the exports are not always transferred to the export producers, particularly in the case of agricultural and extractive commodities. The State, or its economic agents, retain the exchange gains and supply domestic money to the export producers, generally domestic currency, credit, assistance, etc. Thus, the option for an undervalued exchange rate, while making foreign goods more expensive for domestic purchase, does not guarantee per se that imports will tend to be restricted to this unfavourable price.

Undervalued domestic currency is thus associated with excessively cheap unskilled labour, leading this interplay to feed income concentration. In face of this income concentration, it seems to be natural that the Public Authorities make efforts to reduce the trend to expand imports through the domestic production of importable commodities of high exchange values, as durables and luxury articles. This sumptuous import substitution (Furtado) is related to more rapid mechanisms of income creation and concentration and it is not certain that it is carrying with it the necessary reduction of imports.

An additional mechanism is related to the importer's behaviour in the case of continuous devaluation policies. If the importer does not represent a considerable part of the domestic import trade, as generally is the case of big trade houses, the devaluation mechanism can compel this importer to some import

substitution, through the local producing of import-demanded commodities. This mechanism is notwithstanding less useful if the domestic policy does not make the demanded inputs cheaper to substitutive industrialization. Thus, the use of this potential mechanism should require partial liberalization policies, as well as differentiation on the exchange rates, as in the case of a multiple rates system. Although several manufacturing activities benefit from import restrictive mechanisms, the more extended restrictions are in use to protect big firms which operate in outputs of durables and luxury commodities.

(2) Both preferential exchange and credit mechanism in support of durables expansion. - The importance of expanding durables is also related to the need of gradually to introduce the country in the international market as a producer of durables components, and by this way cut the vicious circle of the country, being a primary commodities exporter. In order to raise the domestic capacity to produce manufactured commodities, (goods which the country is supposed to be soon the exporter of) a given degree of official favour is demanded. This favour, in the Brazilian case, is done under the form of incentives, as subsidies, cuts in taxation, facilities to import equipment and know-how, etc. An important condition is the easy credit which benefit the producers of durables, as well as cheap inputs when locally produced, as transportation costs, electric power costs, etc.

A question should arise on the form that preferential exchange is attributable in a condition of a free exchange market situation. The point is that even in the condition of undervalued cruzeiro, or because of this condition, the demand for exchange resources grow stronger, and the Government tie to a great extent a considerable amount of exchange reserves to projects, according to a list of priorities. This project-linking of the exchange amounts consists in practice of the use of preferential exchange, without the need of establishing different prices for this attributed exchange. The underpriced character of this attributed exchange is promoted through low cost for credit, which is generally tied to the same project by the exchange quotas.

(3) A strong presence of the State in the economy. - We have mentioned this condition before, and it becomes particularly important when the State owns a large sector of current productive corporations. This condition was the result of the low level of the speculations in the country connected with productive activities, which made it difficult for corporations to raise funds in the Stock market in order to finance big projects. Thus, the main investments must be created by Public sources, through different mechanisms. Corporations as CSN (steel), BB (Banco do Brasil), Eletrobrás (electric power), Petrobrás (oil and trading), Vale do Rio Doce (mineral extraction) are obvious solutions in face of insufficient resources or hostility of the Private Sector to the activities they represent. The presence of the State in foodstuffs, tobacco or wood processing is certainly less obvious. The expansion thus followed the limits of the legal structure of the country, and the corporations also expanded as conglomerates, in an attempt to assure adequate rates of return, in order to correspond to the previous investments of public resources.

These corporations are becoming of growing importance in the domestic economy. They already represent certainly more than 50 per cent of the annual total Public investment in fixed assets. This figure is decisive, when we consider the absolute dominant character of the Public investments, when in reference to large projects, as infrastructure works.

Besides this presence of the State as a producer, it remained in the period as an important force for allocation in the market, since this powerful economic position much influenced the Stock market direction, as well as the resources the Government injected in this market, when it became necessary.

(4) A growing differential in the policy of returns to the economic factors (with a trend for squeeze of wages). - As we have stated before, the Government policy toward labour as a factor, was one of reducing the Public investments in it, with schools, education, health service, etc. as well as of stimulating the mobility in the labour market. The legal limit to trade unions movements was reduced to a minimum. Consequently, the trend in the period was for a growing differential in intra- and inter-gains to labour for different branches and sectors, as well as also a growing differential between the historical margin of returns to labour and capital contributions to the economy and the actual margins in the period. The fact that this period showed a larger differential on the return to the factors is to be interpreted in terms of conditions (1) and (2) which we described earlier. This policy of return implemented the conditions for an existence of a sumptuous market in a LDC economy.

(5) Promotion of Exports.- The industrialization policies with export growth, as mentioned, is based on a strong effort to promote exports. In fact, this result is the other side of condition (1), once the producers and exporters became gradually oriented to satisfy demands abroad. In the Brazilian case, while the Brazilian foreign trade position was not improved by this participation based on increased efficiency (and not increased productivity), the overall volume and gains of exports was tremendously growing, a phenomenon which contributed to promote a larger capital inflow to the country. This large capital inflow, however, was not submitted to control, and it was considerably constituted by short-term capital of speculative nature, which was intended to profit from the systematic policy of devaluations. As a result of the fact that the Government Authorities avoided to develop a mechanism for control and disestimulance of short-term speculative capital, the costs for liberalization increased more than it otherwise should have occurred to.

The expansion of the exports quantum, while followed by a drastic reduction of the relative exports values, was characterized in absolute terms, by an expansion of the foreign currencies' gains, as can be seen in table 11.1. This contributed, aside from capital inflows, to expand the capacity of imports of the country, and consolidate by this way the industrialization-cum-exports model, as characteristic of post-1964 policies.

(6) A strong indebtedness to finance conditions (1), (2), (3) and (4). - As described earlier, the process of National debt is closely associated with the effort

of the country to acquire more rapid growth. On one hand, we have the imbalances of trade, which require money issuing to cover the Government's debts abroad and consequently money devaluations or exchange rate manipulations. In the case of post-1964 policies, the trade imbalance was currently of trade deficit nature, which require inflow of foreign currency to cover the difference between the total domestic capacity of payment abroad and the actual expenditures made abroad. The weapon that post-1964 Administrations employed systematically to counter the domestic counterpart of these imbalances was devaluation. Devaluation, as well as it counterworks the growing domestic costs it also expands the domestic indebtedness abroad, thus being a "boomerang" weapon. Thus the Government was making use of systematic expansion of the foreign domestic debt to maintain the balance of payments into a balanced position.

On the other hand, the fact that the Brazilian Government was direct responsible for most of the expansive projects in the domestic economy, and at the same time the Governemnt held the monopoly or quasi-monopoly of the foreign currency contributed to the policy of using the foreign and funded debts as a mechanism of income redistribution. Thus, when the Government implemented monetary policies to adjust internal and external Brazilian markets, and instituted indexment of assets and securities to assure the rate of return to investors, the Government used the National indebtedness as a form of reducing the real income of the poor people and expanding the real income of the more affluent in the society. The reduced role of fiscal policy to adjust the internal Brazilian market seems to be a more inadequate policy adopted by post-1964 Administrations, and have contributed thus to increased income disparities, among individuals and among regions.

As we can possibly conclude, the conditions (3), (4), (5) and (6) were of great importance to accelerate the changes in the structure of the domestic relative demand, and thus, promote more rapid growth. This more rapid growth, however, showed a strong amount of fluctuations than the policy followed before, the import substitution; simply due to the fact, the acceleration of internationalization curtailed the time necessary to adjust the domestic business. Simultaneously, the above mentioned conditions (1) to (6) would difficultly occur without the occurrence of hypotheses (e) and (f), as we discussed previously in section 1.1.D, :

(e) Due to the mounting pressures of consumption and also demands for investments, the Government re-oriented the Public policies toward preferential development of durables. The post-1964 policies opted for further income concentration and expansion of durables, since a broader distribution of wealth was not compatible with more rapid growth. The Government Authorities seems to have tentatively answered the question: How to produce a restrictive policy which made interest rates going up and improve the trade balance, while reducing real wages and domestic investment? The adequate mix have combined: (1) reduced domestic consumption of traditional items, for stimulating the exports; (2) accumulated unused capacity; (3) extended unemployment; (4) devaluations; (5) additional income concentration; (6) expansion of durables and "luxury production". While the roots for this change

in policies can be attributed to the rapid process of industrialization, the elimination of a free interplay in the labour market contributed, in a special degree, to these last development in the post-1964 policies.

(f) Excess liberalization has reduced the capacity of the domestic economy to absorb the impact of international events and contributed to high domestic costs of capital and output in relation to standards prevailing abroad. - The Government, in the implementation of post-1964 policies, probably underestimated the role of the State as a direct economic agent in the previous period and intended to finance - many times with external savings - a more free developmental course based on the interplay of international corporations and the domestic private sector. In order to finance this shift, a particular role was now attributed to increasing exports, which, notwithstanding its expansion, revealed itself incapable of paying for either the imports or for the costs of capital movement. The cause for this failure seems to be the excess of liberalization, promoted by the Brazilian Public Authorities. These policies, especially the devaluations, exceeded the absorptive capacity of the domestic economy, which thus could not follow the expansive costs for foreign capital and other inputs. While the "oil crisis" was a component factor of these unfavourable developments, the main hindrance seems to have been the erroneous policies which resulted from excess liberalization.

11.3. The Achievements of Industrialization

A balance of the positive results of industrialization in the period 1964--1980 will include, as before, a broad view on foreign trade evolution, income developments and the performance of the manufacturing branches.

11.3.1. Unfavourable Foreign Trade?

As we know, since the late fifties, the prices of primary commodities entered negative developments in relative terms, which are caused, in part, by the excess of supply and, in part, by inadequate policies of LDCs and trade barriers of MDCs. In face of this development, the Brazilian Authorities intended to promote both (a) the expansion and (b) the diversification of exports.

In relation to the expansion of exports, we can say that Brazilian Administrations were well succeeding since the real value of the exports grew at an average rate of 15.1 per cent annually, in the period 1971--1979. This expansion was followed by an expansion of the purchasing power of the exports with the average annual rate of 16.2 per cent in the same period. (see table 11.1., in real US dollars of 1972)

Notwithstanding this tremendously advantageous long-run expansion, when we consider the nominal terms of trade in the same period we can see a less favourable position. This resulted certainly because of the excessive imports, in relation to the expansion of the purchase power of the exports.

From a historical perspective, the development of the terms of trade in the seventies can be considered, yet, worse than in the preceeding decades. This unfavourable foreign trade has be constituted into a serious source of stagna-

tion and expansive indebtedness, under the premises of more rapid economic growth. A question would arise as if the less favourable development of the terms of trade, besides its demand for expansive indebtedness also can be considered as a source of the subsequent business squeeze in the early eighties. The answer is positive, since when the capital inflows became too much expensive the country was constrained into depression.

Indeed, the current domestic capacity of payments was stable only due to the continuous capital inflows (see columns (3) and (4) of table 11.2.). This precarious stability was eliminated when the country revealed its incapacity of making payments according to the schedules, due to exchange policy's changes a-broad.

Table 11.1.
Brazilian Purchasing Power of the Exports.

In 1972 Constant U.S. Million of Dollars.				
Year	FOB Export Value	Nominal Terms of Trade 1956 = 100	Export Purchasing Power	Variations in Terms of Trade (4)-(2)
(1)	(2)	(3)	(4)	(5)
1971	3,025	78	2,360	-665
1972	3,991	83	3,313	-678
1973	5,865	88	5,161	-704
1974	6,920	56	3,875	-3,045
1975	5,827	64	3,729	-2,098
1976	7,654	73	5,587	-2,067
1977	8,645	90	7,781	-864
1978	8,412	83	6,932	-1,430
1979	9,335	84	7,841	-1,494

Source: Banco Central and Banco do Brasil.

We can observe that while the Fob export value in constant dollars expanded considerably in the period, this expansion was insufficient to cover, as is said, the changes in prices abroad and the amount of demanded imports. This was caused by the continuous fall in the price of exported tonnage (f.ex., in 1969 the average exported tonnage was 20 per cent of the value of the one exported in 1964).

Despite the less favourable evolution of the import prices (or the relation between export and import prices), the country experimented an expansion, in real terms, of the export purchasing power abroad an important condition to assure the necessary capital inflows which were demanded. This position does not show, differently, any radical improvement when compared with the performance of the Brazilian foreign trade in the pre-1964 period. We see that the position of trade corresponds in general to a given position in the international division

Table 11.2

Table 11.2.
Brazilian Capacity to Import.

Year	In 1972 U.S. Constant Millions of dollars.							Value of Imports	Deficit or Surplus of Import Cap. (9)=(7)-(8)
	Export Power	Foreign Capital Inflows	Total Domestic Capacity of Payments Abroad	Debts Amortization	Capital Remittances Abr.	Import Capacity (7)=(4)-((5)+(6))			
							(1)		
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1971	2,360	1,427	3,787	885	2,631	271	3,861	-3,590	
1972	3,313	3,799	7,112	1,202	2,637	3,273	4,789	-1,516	
1973	5,161	4,110	9,271	1,582	2,568	5,121	6,622	-1,501	
1974	3,875	5,318	9,193	1,671	2,100	5,422	12,238	-6,816	241
1975	3,729	3,715	7,444	1,460	2,501	3,483	9,112	-5,629	
1976	5,587	5,383	10,970	2,258	2,499	6,213	10,297	-4,084	
1977	7,781	4,974	12,755	2,896	2,468	7,391	9,527	-2,136	
1978	6,982	8,316	15,298	3,539	2,612	9,147	10,018	-871	
1979	7,841	6,507	14,348	3,908	2,547	7,893	10,999	-3,106	

Source: Banco Central and Banco do Brasil.

of labour. This position is less receptive to affirmation of ideological or propagandistic character. The country was showing the same position in the mid seventies than in the mid fifties in the world trade (with a less than 1 per cent position of participation).

The main important new element for a radical improvement in the Brazilian trade position was in fact scarcely experimented during the 1960s and it was slowly advancing in the 1970s; the export of manufactured commodities. Its composition is largely favourable to Brazil, since being constituted by labour-intensive items, but the trade barriers had produced a strong barrier to the expansion of the Brazilian position.

The collapse of the capacity of indebtedness of the country in the end of the period seems to be occurring at a moment where the Brazilian difficult position of the mid seventies had been overcome. It seems to be that the Government's hesitation to promote a business squeeze in 1978-79 contributed to this collapse. Once the Government avoided a recessionary policy both in 1978 and 1979, it seems like the position of the balance of payments came completely out of control in 1979, with reduced inflows and loss of confidence abroad.

This Governmental refuse to accept business adjustment reveals also the official concept that the Brazilian economy is not submitted to cyclical movements, an official point-of-view which lack any kind of support of the facts. Such concepts work in the sense of reducing the capacity of the policy-makers to react, when the first warning signals showed the unfavourable cumulative movements in the economy, as was the case in the late seventies. Thus, this refusal to admit the evident cyclical character of the Brazilian expansion contributed to a more strong downswing, or even depression, as is characteristic of the early eighties.

11.3.2. The Performance of the Industries of the Manufacturing Sector

As we can observe from tables 11.3 and 11.4, the manufacturing industries progressed notably through all the period, showing in adjusted values, that the cyclical component has not dampered significantly the growth process. This certainly has played a role in the fact that the Government Authorities generally refused to admit the occurrence of cyclical patterns in the Brazilian economy. The tremendous expansion of the manufacturing industries has consumed a high amount of capital resources, since the Government Authorities, in the position of the main credit creator in the market, favoured the preference by capital-intensive methods in the corporations.

In table 11.3. the tremendous expansion of Chemical industries call for attention. It was caused by the expansion of petrochemicals, and the high favourable developments these industries received due to the practically inexistent competition of coal. Gasoline (and in the last years alcohol) has been modelled to be a major profit-earner, and also includes in its final costs those for future investments. The high cost of oil derivatives in the domestic market has not only resulted in a source of expansion of these industries, but also as an inflationary source, due to sustained upward-induced prices. This industry shows quite

Table 11.3

São Paulo Manufacturing Industries. 1949 cruzeiros. ((,)=billion)

Year	Exponentially Adjusted.		1950-1980.		
	Total Manuf. Industries	Metallurgy	Machines & Tools	Transport Equip.	Chemical
(1)	(2)	(3)	(4)	(5)	(6)
1950	44,6	3,88	3,08	4,89	3,38
1951	48,6	4,27	3,39	5,34	3,79
1952	52,9	4,68	3,73	5,83	4,23
1953	57,5	5,14	4,10	6,37	4,73
1954	62,6	5,65	4,50	6,95	5,29
1955	68,2	6,20	4,95	7,59	5,92
1956	74,3	6,81	5,44	8,29	6,62
1957	80,8	7,47	5,98	9,05	7,41
1958	88,0	8,21	6,58	9,88	8,29
1959	95,8	9,01	7,23	10,79	9,28
1960	104,3	9,89	7,95	11,78	10,38
1961	113,6	10,86	8,74	12,87	11,61
1962	123,6	11,93	9,61	14,05	12,99
1963	134,6	13,09	10,56	15,34	14,53
1964	146,5	14,38	11,61	16,75	16,26
1965	159,5	15,79	12,77	18,29	18,19
1966	173,7	17,33	14,03	19,97	20,4
1967	189,1	19,03	15,43	21,8	22,8
1968	205,8	20,9	16,96	23,8	25,5
1969	224,1	22,9	18,64	26,0	28,5
1970	244,0	25,2	20,5	28,4	31,3
1971	256,6	27,7	22,5	31,0	35,7
1972	289,2	30,4	24,8	33,9	39,9
1973	314,8	33,3	27,2	37,0	44,7
1974	342,7	36,6	29,9	40,4	50,0
1975	373,1	40,2	32,9	44,1	55,9
1976	406,2	44,1	36,2	48,1	62,5
1977	442,2	48,5	39,8	52,5	70,0
1978	481,4	53,2	43,7	57,4	78,3
1979	524,1	58,4	48,1	62,7	87,6
1980	570,6	64,2	52,8	68,4	98,0

Source: F.I.B.G.E. and F.G.V.

well the interplay of income concentration (of automobile owners), the "socialization of the losses" (higher transportation costs) and rapid expansion (of petrochemicals, due to enlarged profits, as well as of oil-refining).

Despite the interesting expansion of machines & tools (including, of course, machine-tools) the branch is still clearly insufficient to the domestic demands, which results in heavy pressure on imports. A considerable market is also available in the ALALC-LAFTA countries, and the complex development of this branch is required for a more sustained and cheap pace of industrialization. In the case of international competition to fulfill the domestic orders, especially in the late seventies, the Brazilian Government was hardly criticized by the domestic producers, since their prices, clearly over the international proposals, have been refused as excessive, while not necessarily representing a higher cost in exchange values. The point is that this market has been internationalized in the domestic economy, while this internationalization has implied a minor transference of more advanced technology, reasons by which the corporations abroad can present a better proposal than their domestic associates, due to the scarce variations of models in the Brazilian domestic productive lines.

When examining table 11.4., we see the structural shifting of the branches in reference during a 30-year period. Foodstuffs, which represented ca. 25 per cent of the whole manufacturing sector in the year basis (1950), in the end of the period has decreased its participation to some 18.8 per cent. The production of paper and the like, which occupied a value of less than 1.8 per cent in the origin of the period, improved to over 2.5 per cent its participation. It is important to observe that in a large LDC economy, the structural change require quantitatively amounts of resources which had to be enormous, in order to be producing the adequate branch shiftings. Textiles represented in 1950, also in real terms, ca. 16.6 per cent of the manufacturing product, coming to a position of ca. 8.6 per cent in the end of the period. When in reference to civil construction, an important sector for labour consumption, the position was not much altered; 5.4 per cent in 1950 and 5.2 per cent in 1980. This certainly represents a good effect in terms of the job market.

The most impressive phenomenon in the Brazilian industrial development of manufacturing is certainly the widespread expansion that this sector presented practically in all states of the country. As an example, in São Paulo state, the leading area in the process of industrialization, the manufacturing sector expanded more than 27 times in the period of reference (1940-1980). But in Pará, a less industrialized region, in the same period, the manufacturing product expanded ca. 11.6 times; in Maranhão, a region which clearly shows extremely low output per capita, the output grew in the period, also for manufactures, 16.3 times; and in Rio Grande do Sul, a relatively traditional industrialized area, the output of the manufacturing sector expanded more than 20 times in the period.

It is clear that for achieving the elimination of the regional disparities, which in fact are growing at the present time, it is necessary that the less developed regions of the country grow at rates more expressive than those of the

Table 11.4

Brazil. Manufacturing Industries. 1949 billion of cruzeiros ((,)=billion

Year	Exponentially Adjusted.		1950-1980.			
	Total Manuf. Industries	Non-Metal. Branch	Paper & Sim.	Textiles	Foodst.	Civil Construc- tion
(1)	(2)	(3)	(4)	(5)	(6)	(7)
1950	97,3	3,41	1,72	16,15	24,7	5,30
1951	105,4	3,71	1,88	17,10	26,4	5,71
1952	114,0	4,03	2,06	18,10	28,3	6,20
1953	123,4	4,38	2,25	19,16	30,3	6,72
1954	133,4	4,76	2,46	20,3	32,4	7,20
1955	144,3	5,18	2,70	21,5	34,7	7,81
1956	156,1	5,63	2,95	22,7	37,2	8,41
1957	168,9	6,12	3,23	24,1	39,8	9,10
1958	182,7	6,66	3,54	25,5	42,7	9,81
1959	197,6	7,24	3,87	26,9	45,7	10,60
1960	213,7	7,87	4,24	28,5	49,0	11,46
1961	231,2	8,56	4,64	30,2	52,4	12,38
1962	250,1	9,30	5,08	32,0	56,1	13,37
1963	270,5	10,11	5,56	33,8	60,1	14,45
1964	292,6	11,00	6,09	35,8	64,4	15,61
1965	316,5	11,96	6,66	37,9	69,0	16,87
1966	342,3	13,00	7,30	40,1	73,9	18,23
1967	370,3	14,13	7,99	42,5	79,1	19,69
1968	400,5	15,37	8,74	45,0	84,7	21,3
1969	433,2	16,71	9,57	47,6	90,7	23,0
1970	468,6	18,16	10,48	50,4	97,2	24,8
1971	506,9	19,75	11,47	53,3	104,1	26,8
1972	548,3	21,5	12,55	56,4	111,5	29,0
1973	593,2	23,3	13,74	59,7	119,4	31,3
1974	641,9	25,4	15,04	63,2	127,8	33,8
1975	694,3	27,6	16,47	66,9	136,9	36,6
1976	751,0	30,0	18,03	70,8	146,6	39,5
1977	813,0	32,6	19,73	75,0	157,1	42,7
1978	879,4	35,5	21,6	79,4	168,2	46,1
1979	950,8	38,5	23,6	84,0	180,1	49,8
1980	1028,6	41,9	25,9	88,9	192,9	53,9

Source: F.I.B.G.E. and F.G.V.

more advanced domestic regions (Furtado, 1953). This effect, however, is difficult to achieve in conditions of market competition, when the most endowed regions absorb the major sources of development, including the skilled labour of the poorest regions. Thus, it is to expect that those regions which present a more difficult climate or some natural disadvantages (as reduced water reserves) will remain growing at inferior rates and depending on the Public resources to achieve some degree of complementarity with the most advanced areas.

One extreme disadvantage of the present situation in Brazil is the fact that the Federal Government, under centralist view, does not give any kind of compensation for the natural resources drained from the poorest regions of the country, and processed for exports or in profit of the most developed regions. As an example, most of the domestic produced oil come from states which are very poor, while the Federal Government places the processed resource at the more developed area, considering the resulting jobs of the industrial extraction as a sufficient gain for the original producing region. Thus, political bias can be considered an additional source which feeds the inequality and income concentration, while this situation does not necessarily result from the simple fact of industrialization.

The difficult terms of trade between the different states of the Brazilian Federation (which, as we mentioned before, only nominally is a federation) has contributed to the general imbalanced position of the economy, and therefore leads to the observation that, according to per capita, there is two Brazils: one like Belgium and another like India (Bacha, 1973).

Given the above mentioned aspects, it is important to consider that the industrialization process has developed in a favourable place, but the policies to achieve more rapid growth have a negative effect with reference to income distribution. This negative aspect, however, has difficulties in being admitted as a necessary part of the process of industrialization.

When looking at the information of table 11.5., we see the expansion of the working force in branches which are vital to manufacturing development. In this period (1940-1970), while the demand for labour throughout the period, the demand remained basically satisfactory, especially when regarding the branches of tertiary activities. In the period of reference, civil construction expanded its participation in the totalemployment of working force into the secondary sector from 24.1 per cent to ca. 32.5 per cent, which imply both a strong demand for civil construction and also a decreasing absorption by the current manufacturing industries.

11.3.3. Disposable Income, Consumption and an Interpretation of Empirical Findings

As we explained before in this chapter, there is a close relationship between the Brazilian National Debt and the progression of imports. If we construct a model, including an error-term, where the Brazilian foreign debt is used as an explanatory variable to the total value of imports of cereals, mineral fuel and machinery (both in current dollars) for the period 1967-79, the result will be

Table 11.5.
Brazil. Average Estimates on the Working Force in some Branches.

Year	Exponentially Adjusted. (in thousands of workers) 1940-1970.				
	Secondary Sector	Manufact. Industries	Civil Construction	Transp & Distribut. & Storage	Industr. Services
(1)	(2)	(3)	(4)	(5)	(6)
1940	1,533	996	370	500	49
1941	1,609	1,044	393	517	52
1942	1,689	1,096	417	535	56
1943	1,773	1,150	443	553	59
1944	1,861	1,861	470	571	63
1945	1,954	1,265	499	590	67
1946	2,051	1,327	530	610	72
1947	2,153	1,393	562	631	77
1948	2,260	1,461	597	652	82
1949	2,372	1,533	634	674	87
1950	2,490	1,608	673	697	93
1951	2,548	1,644	693	729	95
1952	2,607	1,681	714	762	96
1953	2,667	1,719	735	797	98
1954	2,729	1,757	757	833	100
1955	2,792	1,796	780	871	102
1956	2,856	1,836	803	911	105
1957	2,922	1,878	827	953	107
1958	2,990	1,919	852	996	109
1959	3,059	1,962	877	1,041	111
1960	3,130	2,006	903	1,089	113
1961	3,299	2,105	963	1,104	117
1962	3,477	2,208	1,027	1,118	121
1963	3,665	2,317	1,096	1,133	125
1964	3,863	2,431	1,169	1,149	130
1965	4,071	2,551	1,246	1,164	134
1966	4,291	2,676	1,329	1,180	139
1967	4,522	2,808	1,418	1,195	143
1968	4,767	2,946	1,512	1,211	148
1969	5,024	3,091	1,613	1,228	153
1970	5,295	3,243	1,720	1,244	158

Source: F.I.B.G.E.

$$I = 0.61898 + 1.0175 + E_i \quad (XLV)$$

$$(4.614) \quad (0.8081)$$

$$R_{YX}^2 = 0.9531$$

$$T_E = 2.524 \quad t = 14.9515$$

A result which points favourably to our hypothesis.

The same opinion seems also to be supported by an inspection at the following page, where two graphs show the position of the net funds of the Federal public debts and the position of the balance of payments, end of year situation. We can see that, while the funds of the debt kink upward, the balance of payments evolution kink downward, phenomena which we may explain as follows: the foreign debt is a governmental source of resources.

When we used an index of the value of exports to explain the index of the value of imports in the period 1967-79, we obtained:

$$I_{\text{index}} = 16.657 + 0.7296 X_{\text{index}} \quad (XLVI)$$

$$R^2 = 0.9274$$

The result gives a clear indication of the relationship existing in model (XLV). These result seems to point to a reduced performance of domestic savings, when in reference to the exchange resources. We know, from the existing evidence, that this was really the case in the period. The strong reliance of industrialization policies on internationalization and liberalization required growing amounts of exchange resources, while in fact the economy was producing an amount of these resources which could not expand into the demanded amount. The reduction of the role of the domestic savings is thus visible, becoming of a secondary importance, the form in which the domestic savings were being produced. This hypothesis, while high explanatory, reduces the performance currently attributed to the supposed role of domestic savings in the set of post-1964 policies.

A) The Deposits Function.

Using the variable "deposits in all banks, Dec. 31," of Banco Central do Brasil, we produce the deposit function used in this section. The result, when the explanatory variable is non-agricultural gross income, for the period 1964-1971 was:

$$S_D = -5415.484 + 4.60072 Y_{\text{nag}}^G \quad (XLVII)$$

$$R^2 = 0.9974$$

$$t = 940.8961$$

This relationship seems to point out a stronger performance of urban, or non-agricultural income in the evolution of the deposits, and consequently, the

domestic savings. When considering agricultural income as the explanatory variable, we obtained: (1964-71)

$$S_D = 2988.81 + 0.4479 Y_{ag}^G \quad (XLVIII)$$

$$R^2 = 0.9886$$

$$t = 213.643$$

The comparison of the two results shows the apparent shift of the savings mechanism, now predominantly explained by the "non-agricultural income". However, the results are very close to justify any definite conclusion. The use of the nominal increment of disposable income as explanatory variable in the deposit function, give us (the same mentioned period, 1964-71):

$$S_D = 5594.484 + 1.47642 \Delta Y_d^N \quad (XLIX)$$

$$R^2 = 0.9805$$

$$t = 124.3876$$

A relationship which shows a high elasticity of nominal increments of disposable income to explain the behaviour of the deposits function. Let us now add the performance of the gross agricultural income to the explanatory power of the non-agricultural income, in order to achieve a more complex deposits function for this period:

$$\log S_{D_{64-71}} = 9.3705 - 0.062422 \log Y_{na}^G + 0.1032345 \log Y_{ag}^G \quad (L)$$

$$R_{Y.12}^2 = 0.4000$$

$$S_{Y.12} = 11.448$$

$$S_Y^2 = 93.616$$

These results seems to limit the results of the two previous regressions in the following direction: while each variable per se has a high explanatory value, the two together explain roughly some 40 per cent of the variation of the deposits function. The interpretation must be found in the strong capital outflow in the period, conducting in this way "corrective inflation" and reduced power of the savings mechanism, although domestic, to be explained by the domestic gross income.

However, when adjusting the same type of model to the period 1972-1979, where the business squeeze role is of a reduced one and where we also find the use of inflationary mechanism to expand and redistribute income, we find:

$$\log S_D = \log -2.579878 + 1.171936 \log Y_{nag}^G + 0.187115 \log Y_{ag}^G \quad (LI)$$

$$R_{Y.12}^2 = 0.7931$$

$$S_{Y.12}^2 = 0.301934 \quad S_{\bar{Y}}^2 = 0.16839$$

This relationship becomes improved by the inclusion of the increments of nominal disposable income, when studying the period 1972--1979:

$$\log S_{D_{72-79}} = \log -0.834731 + 1.400849 \log Y_{nag}^G - 0.197775 \log Y_{ag}^G - 0.203340 \log Y_d^N \quad (LII)$$

$$S_{Y.123} = 0.02139 \quad R_{Y.123}^2 = 0.8730$$

This model supports not only our hypothesis of strong repressed demand in the period, the declining demand of some analysts (Belluzo), but also indicates, as being correct, our basic hypothesis of the income development in this period.

When considering the partial coefficient of determination r_{Y1}^2 , the relationship between "deposits" and the explanatory variable non-agricultural income, we achieve :

$$r_{Y1}^2 = 1.000$$

which seems to support our hypothesis of urban repressed demand.

B) Disposable Income and Consumption Function.

Let us look firstly into the relationship of the "traditional output" (an index of foodstuffs processing of FGV, physical, 1973 = 100), as a consumption function (for hypotheses see chapter six). Considering, for the period 1965-1980, the disposable income of the lowest 40 per cent income-strata, as the explanatory variable, we have:

$$C^t = -131.561 + 2.2578 Y_L^d \quad (LIII)$$

$$R^2 = 0.9590 \quad t = 89.3709$$

There is a strong relationship between the disposable income of the lowest 40 per cent of income-strata and the foods -processed physical index, as a "proxy" of traditional consumption. We can explain this result through the hypothesis that this income sector used its income fundamentally to basic traditional consumption also in this period. We will now consider the explanatory power of the "traditional output" by the evolution of the nominal index of imports:

$$C^t = -469.616 + 5.8289 I_i^N \quad (\text{LIV})$$

$$R^2 = 0.8986 \quad t = 82.5698$$

This surprisingly high result can be interpreted by the hypothesis that the strong trade liberalization stimulated the competition with domestic food producing (processing) and this is reflected as a high explanatory power of the nominal import index.

When using the "next 40 per cent" position of disposable income, we achieve:

$$C^t = -449.382 + 7.4943 Y_{N40}^d \quad (\text{LV})$$

$$R^2 = 0.9557 \quad t = 82.5698$$

Since the "next 40 per cent" of disposable income attainers explain a bit more (6.35 per cent) than "the lowest 40 per cent", we can interpret as this higher income sector (the next) was restraining less the consumption of processed food than what the "lowest 40 per cent" was doing. This confirms the persistent character of low aggregate income in the Brazilian society, despite the long-run sustained expansion.

Let us now add the performance of the nominal index of imports to the explanatory power of the "lowest 40 per cent", in order to evaluate the resulting "traditional consumption" function (1974 = 100):

$$C_{65-80}^t = 67.544 + 0.366476 Y_L^d - 0.022868 I_i^N \quad (\text{LVI})$$

$$R_{Y.12}^2 = 0.6941 \quad S_{Y.12} = 2.9132$$

While this model explains ca. 70 per cent of the traditional consumption, the marginal decrease of the imports seem to have been reduced in relation to this consumption, a phenomenon which also is compatible with the trade liberalization occurring in the period. We will now include the variable "disposable income of the next 40 per cent income attainers" and see the results:

$$C_{65-80}^t = 25.491 + 0.2343133 Y_L^d + 0.4980567 I_i^N + 0.000413 Y_N^d \quad (\text{LVII})$$

$$R_{Y.123}^2 = 0.7971 \quad S_{Y.123} = 24.926$$

When we only consider the relationship of the dependent variable and the "lowest 40 per cent", we have:

$$r_{Y1}^2 = 0.9590, \text{ which is the same result we achieved in (LIII),}$$

and by including the four variables, the strength of association between "dependent" and "next 40 per cent" is:

$$r_{Y3.12}^2 = 0.3367$$

Which apparently attributes a major function on traditional consumption to the next 40 per cent of income attainers than the result we have previously obtained with regression equation model (XXXIX) for the period 1947-64, characterized as of "import-substitution".

Let us look into a consumption function in a more conventional way. We will explain the real personal consumption as computed in the Brazilian National Accounts by the proxies we construct of the real disposable income of different income attainers. If we explain "personal consumption" by "income from work" (an aggregate constructed including the average income as payment for work), we have (1964-1980):

$$(1) \quad C_i = 99.995 + 0.0973 Y_w^d \quad (LVIII)$$

$$R^2 = 0.8949 \quad t = 32.9775$$

If we consider as the explanatory variable the "disposable income from salaries and properties", we have (1964-1980):

$$(2) \quad C_i = -238.889 + 1.5743 Y_{s \& p}^d \quad (LIX)$$

$$R^2 = 0.9928 \quad t = 535.924$$

In this case, the aggregate consumption function shows a marginal propensity to consume higher than the unity, while in the case of the consumption function of the workers the marginal propensity to consume was inferior to 0.10. This is also compatible with our interpretation that the extreme wage squeeze in the period reduced the current participation of the workers in the expansion of the domestic market.

Let us now consider the explanatory power of the "lowest 40 per cent", in order to achieve a consumption function of "personal expenditures":

$$(3) \quad C_i = 3.9609 + 0.1246 Y_L^d \quad (LX)$$

$$R^2 = 0.9881 \quad t = 323.5080$$

In this case, while the explanatory power is greater, we see a marginal propensity to consume which attributes an increased consumption of 12 cents of real 1949 cruzeiro to the lowest 40 per cent of disposable income attainers, at each increase of one real 1949 cruzeiro in the economy, considered in net terms.

When we consider the next 40 per cent, we have the result:

$$(4) \quad C_i = 0.12474 + 0.4143 Y_N^d \quad (\text{LXI})$$

$$R^2 = 0.9896 \quad t = 370.4658$$

In the case of the consumption function (4), the "next 40 per cent" of attainers of real disposable income improved their consumption with ca. 40 cents of real 1949 cruzeiro to each corresponding real cruzeiro created. Let us consider now the role of the income of the next 15 per cent, as explanatory variable in our consumption function:

$$(5) \quad C_i = -8.8243 + 0.3857 Y_{N15}^d \quad (\text{LXII})$$

$$R^2 = 0.9905 \quad t = 405.7256$$

Now we observe the marginal propensity to consume indicates an almost equally strong coefficient to the 15 per cent of next income attainers, as the previous function (4) have indicated to the next 40 per cent. It is clearly the process of income concentration, and its association with different consumption behaviour of income earners.

Let us now consider the position of the "top 5 per cent" of the income distribution in Brazil: (same period: 1964-1980)

$$(6) \quad C_i = -129.85 + 0.7565 Y_T^d \quad (\text{LXIII})$$

$$R^2 = 0.9922 \quad t = 494.5998$$

As we can appreciate, also this result point in the sense of our hypotheses, and seems to support our general analysis of income concentration and durables expansion.

The different slopes of the above mentioned consumption functions can be seen in the graph on next page, fig. . We see that, despite the process of income concentration, the slope of all the six consumption functions we studied previously are inferior to the 45° line, which can be interpreted as, in the case a comfortable development of the GDP. The "C 7" in the graph corresponds to the adjustment of a function with "the disposable income in the private sector", which is:

$$(7) \quad C_i = 80.345 + 1.524 Y_{PS}^d \quad (\text{LXIV})$$

$$R^2 = 0.9873 \quad t = 303.0076$$

As we see in figure 11.1, the consumption functions C3, C4, C5 and C6 are plotted against the disposable income function. To the different consumption functions correspond, thus, to different levels of GNP (or GDP), since the expenditures will be different. The function C3 (regression equation LX), which represents the income function of the lowest 40 per cent disposable income attainers, locates at the point a3 a negative savings of approximately 40 billions of real cruzeiros, when read as total disposable income in the private sector (1,800). (This dissavings are the difference b-a, as read in the intercept of the 45° line at point b. This vertical line intercepts also the consumption function TE1 at the point c, indicating a position in the GNP function as determined by this level of expenditures (ca. 1,600).

The functions C5 (regression LXII) and C4 (regression LXI) shows positive savings positions, respectively of 90 billions of real cruzeiros and 110 billions of real cruzeiros, in approximate expression. Thus, "the next 40 per cent" should be responsible for some 110 billions of savings, contributing to the economic growth and the economic expansive mechanisms. The "next 15 per cent of disposable income attainers", while contributing more per capita, would present a total inferior amount, in relation to C4. The levels of disposable income function and thus GNP, that these consumption expenditures correspond to, are approximately near (c and g) ca. 1,650. However, the consumption function C6 corresponds to savings of some 400-450 billions of real cruzeiros, and a GNP and disposable income function level tremendously higher: ca. 2,400. Thus, our conclusion is that the income concentration, while contributing to sharper slopes in the GNP, are in intimacy with higher savings and consequently more rapid growth, supporting this interpretation of our basic hypotheses of post-1964 policies.

C) Disposable Income Function.

We use here the same suppositions of chapter 6. Then, when checking our model to data of the period 1965--1980, "tax payments" explain "real disposable income" in the following way:

$$Y^d = -54.616 + 0.2023 T_p \quad (LXV)$$

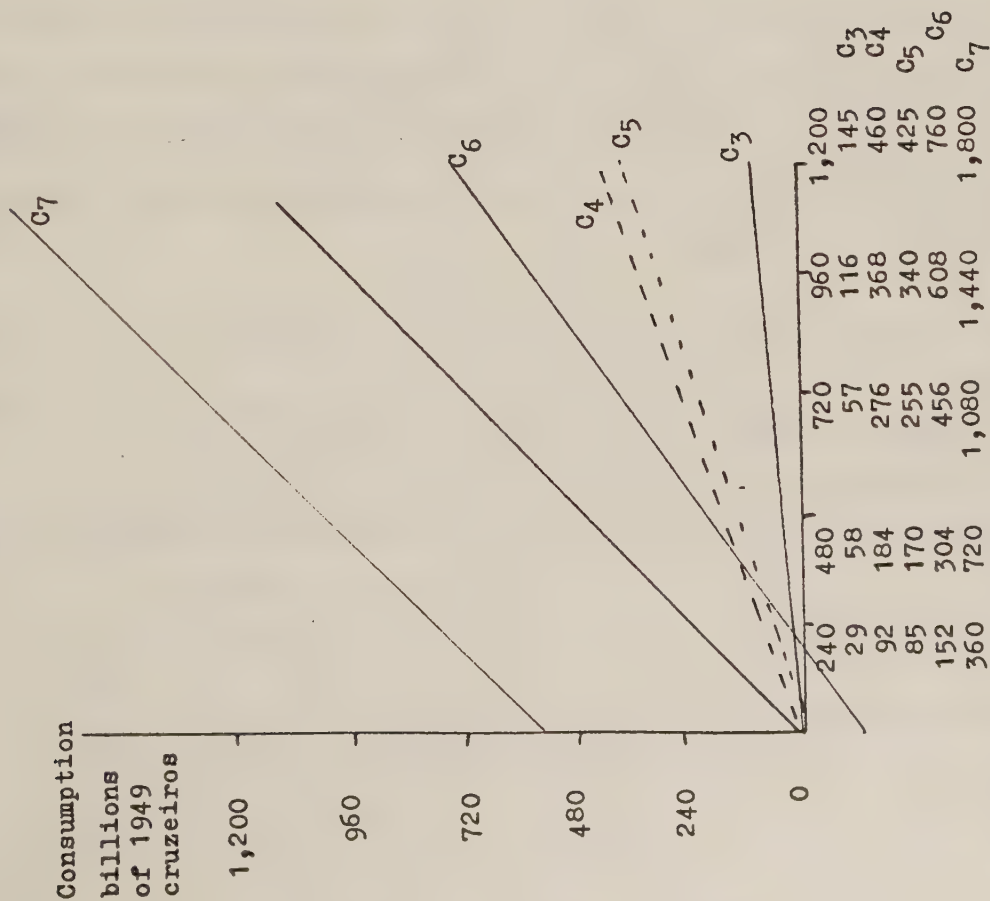
$$R^2 = 0.9956 \quad t = 840.5059$$

This result seems to support our hypothesis of an improved fiscal mechanism in post-1964 policies than before, when compared with the previous period (1947-64). When looking into the explanatory power of "income retained by producers", we achieve:

$$Y^d = 12.0744 + 0.0562 Y_r^p \quad (LXVI)$$

$$R^2 = 0.9918 \quad t = 455.4119$$

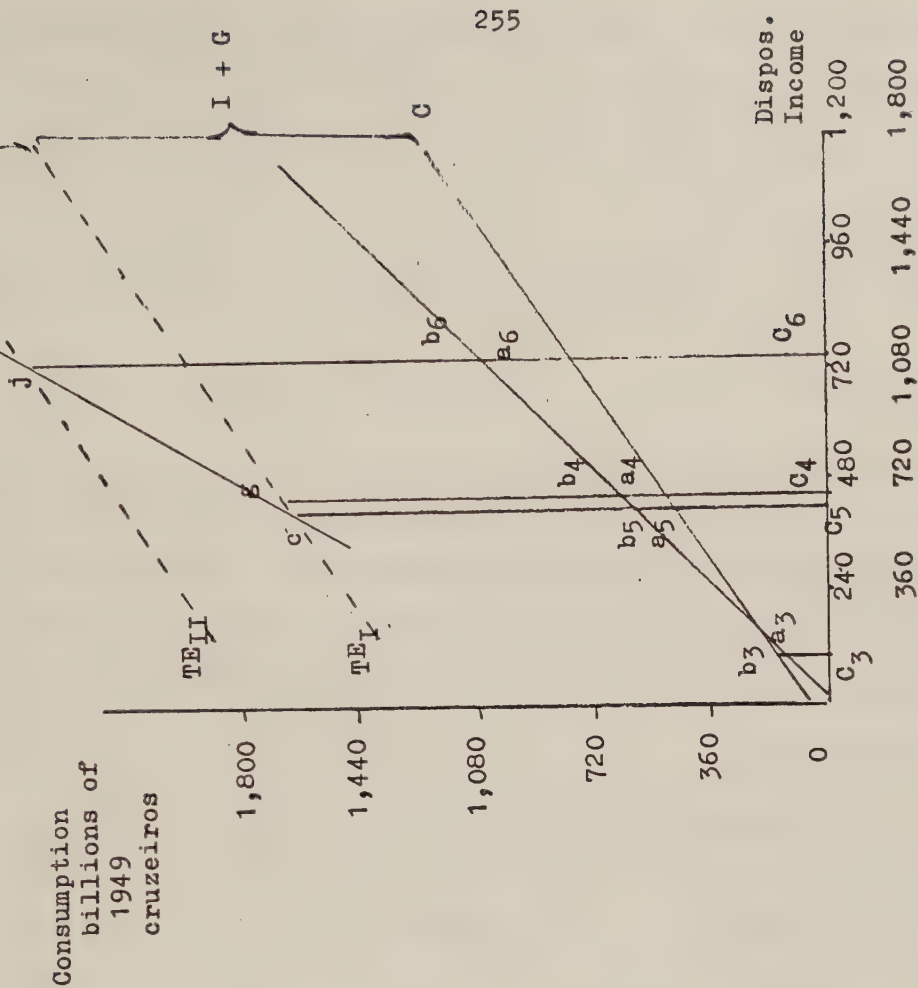
Figure 11.1 Brazil: Different Aggregate Consumption Functions: 1964-1980



Estimates according to income distribution data.

Source: CCN- FGV and DIR-SEEF, MF.

Figure 11.2 Brazil: Disposable Income Function



Source: FGV and MF.

We see, according to (LXVI) that also the position of income retained by producers became more adjusted to disposable income developments in the post-1964 period. This may be interpreted as an improved savings mechanism within the corporate sector. When considering the explanatory power of "net income sent abroad" (1965-1980) we obtain:

$$Y^d = -20.02 + 0.03418 Y_{SA}^N \quad (\text{LXVII})$$

$$R^2 = 0.8664 \quad t = 26.0661$$

This result seems impressively favourable to our hypothesis of liberalization effects on the expansion of capital inflows and, consequently, on the expansion of outflows. This improved flow of resources is characteristic of the industrialization-cum-exports variant adopted after 1964.

Let us now add the explanatory power of "income retained by producers" to the performance of "tax payments to Government" and check the results also for the period 1965-1980:

$$Y_{65-80}^d = 197.836 + 3.525419 T_p + 0.0021761 Y_r^p \quad (\text{LXVIII})$$

$$R_{Y.12}^2 = 0.9993 \quad S_y = 400.19$$

$$S_{Y.12} = 107.19$$

This extremely adjusted development of these variables point out an increased sophistication in the economy toward allocative policies, since these aggregates evolve as influenced by well-defined policies. This supports our hypothesis of the interplay of the Government with the durables expansion, and the use of the spread effects of this expansion. When including the variable "net income sent abroad" the result is:

$$Y_{65-80}^d = 121.909 + 4.03275 T_p + 0.2203814 Y_r^p - 4.023671 Y_{SA}^N \quad (\text{LXIX})$$

$$R_{Y.123}^2 = 0.9999 \quad S_{Y.123}^2 = 49.517$$

If we consider only the relationship of the dependent variable and "tax payments to Government", we obtain:

$$r_{Y1}^2 = 0.9956$$

which is the same result we achieved in (LXV).

When taken into consideration the dependent variable and "income retained by producers", we fix "tax payments" and obtain:

$$r_{Y2.1}^2 = 0.9771$$

and, by including the four variables, the strength of association between "dependent" and "net income sent abroad" (NISA) is:

$$r_{Y3.12}^2 = 0.5380$$

which is a high increment of quality, if we consider the general behaviour of this model for the period 1965-80.

These results seem, thus, not only to confirm the usefulness of the model we have constructed, but also to confirm the importance of the component variables in the developments of real disposable income in the period of study.

D) The Foreign Debt as a Function.

Since the Public deficit is used to promote economic growth with income concentration, and higher levels of GNP stimulate further income concentration, it is important to analyse the function of the foreign debt of the country as a source explainable by real disposable income developments. In this case, a function of the foreign debt can be explained by the following variables:

FD = foreign debt

I_i = nominal index of the imports value

APC_i = index of average propensity to consume

ΔY_i^d = index of increment of disposable income

then, we can write the model as:

$$FD_i^t = a + b I_i + c MPC_i + d \Delta Y_i^d$$

This model of the foreign debt function was checked for the period 1967-1979, since it is clear that during this period the National deficit, financed by external resources, was manipulated in a way able to produce the expansion of the real domestic disposable income. The foreign debt has thus, in this period, played a role of income redistribution.

Let us consider the index of the imports' values as an explanatory variable of foreign debt. (1967-1979):

$$FD_i^t = 115.174 + 0.6293 I_i \quad (LXX)$$

$$R^2 = 0.6091$$

$$t = 32.8200$$

The explanatory value is high, a phenomenon which may be interpreted as the effect of the sustained worsened terms of trade, and the domestic use of debt resources to cover the mentioned imbalance. Let us now look into the explanatory power of the index of the propensity to consume (same period, 1967-79):

$$101.595 + 0.002072 APC_i \quad (LXXI)$$

$$R^2 = 0.1296$$

$$t = 1.3718$$

The relationship is apparently not visible, and we must check the following important relation, i.e. the index of increment of disposable income:

$$FD_i^t = -547.629 + 4.2932 \Delta Y_i^d \quad (LXXII)$$

$$R^2 = 0.9696$$

$$t = 107.5509$$

The explanatory power now seems to be of a great magnitude. This seems reasonable, since our hypothesis was of the expansion of domestic disposable income with the resources of indebtedness abroad.

Let us now consider a more sophisticated variant, by including the performance of the average propensity to consume (index) to the explanatory power of the nominal import index:

$$FD_{67-79}^t = 2930.208 + 1.23295 I_i - 29.05915 APC_i \quad (LXXIII)$$

$$R_{Y.12}^2 = 0.6588$$

$$S_{Y.12} = 222.177$$

The result can be considered as satisfactory and according to our interpretation of the effects of the liberalization. When including, in the above type of model, the increment of disposable income the result will be:

$$FD_{67-79}^t = 793.629 + 0.7335634 I_i - 6.9516194 APC_i - 0.048533 Y_i^d \quad (LXXIV)$$

$$R_{Y.123}^2 = 0.9982$$

$$S_{Y.123}^2 = 257.746$$

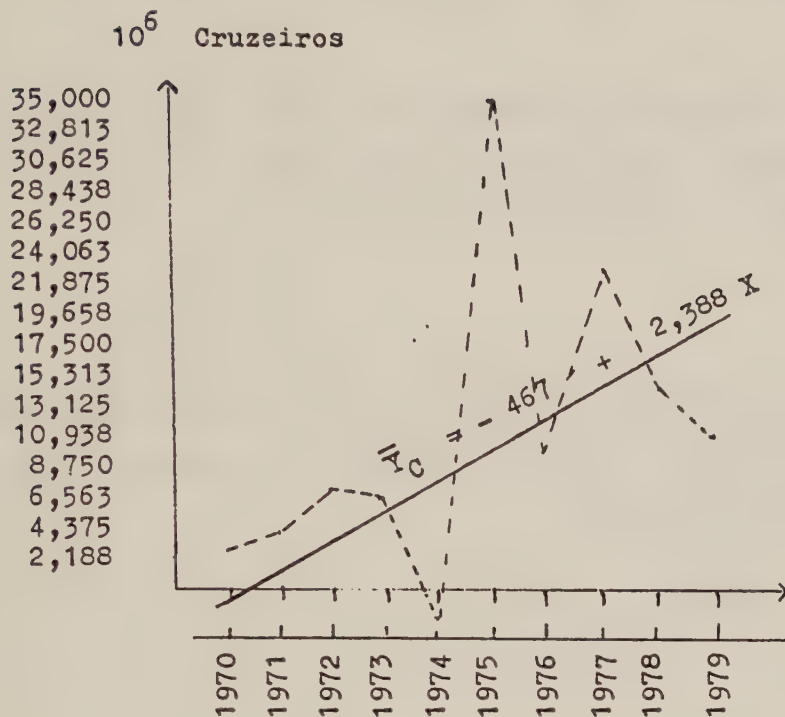
When considering only the relationship of the dependent variable (nominal index of foreign debt) and the nominal import index, we achieve:

$$r_{Y1}^2 = 0.8092$$

Which is approximately the same result we obtained in (LXX).

Figure 11.3

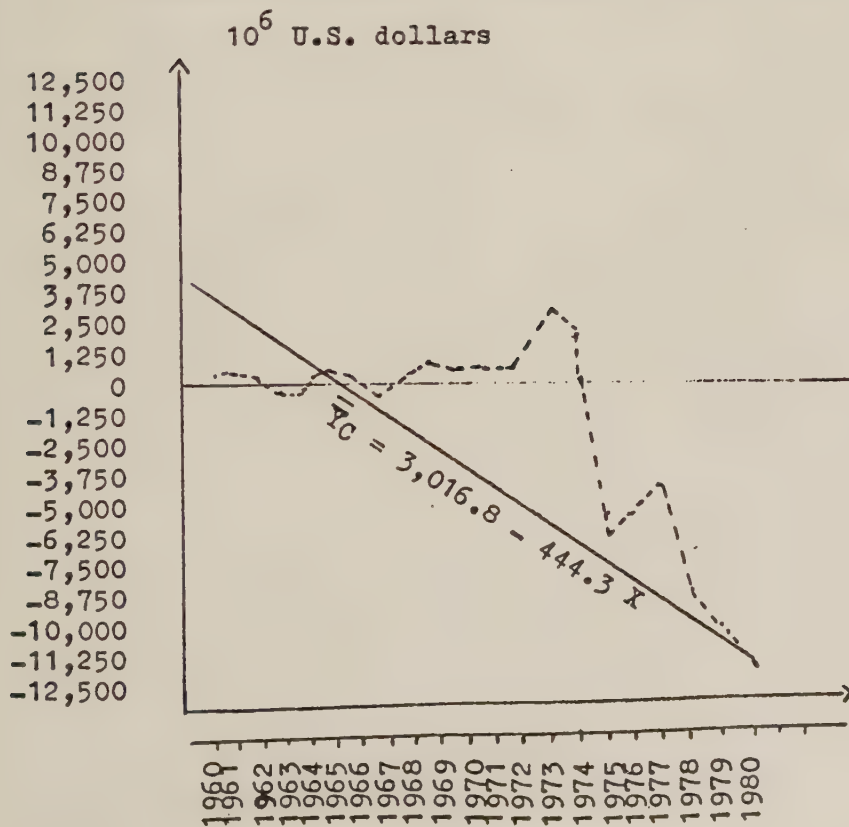
Federal Public Debts: The Evolution of the Net Funds (1970-1978)



Source: Banco Central

Figure 11.4

Brazilian Balance of Payments: End-of-the-year Position



If we now consider "dependent variable" index of foreign debt (nominal) and the average propensity to consume, being the variable "nominal import index" fixed, then comes:

$$r_{Y2.1}^2 = 0.7883$$

This shows a considerable improvement of the previous value found in (LXXI), and by including the four variables, the strength of association between the "dependent variable" and "increment of disposable income" is:

$$r_{Y3.12}^2 = 0.9947$$

The result seems to support not only the value of the model to explain the process of Brazilian foreign debt according to our hypothesis but also to show the improvement of the quality its use can carry to the study of the relationship of the above mentioned variables.

FINAL CONCLUSION

12. FINAL CONCLUSION.

As we emphasized previously, the period 1940—1980 comprises the main effort produced in Brazil for industrialization. This main effort is characterized by the development of the State or Public action, firstly to protect sectors in a difficult position, as a result of international fluctuations, and secondly to promote economic growth. In the effort to promote economic growth, the State evolved gradually from the position of an assistant of the Private Sector to the position of a direct economic agent. In order to characterize this process, we established some hypotheses in the first chapter.

12.1. The Main Hypotheses

Our main hypotheses to characterize the recent Brazilian process of industrialization were resumed as follows:

- (a) The State should have transformed into the main economic agent in the market.
- (b) The State should have financed industrialization with the gains of foreign trade, due to the exchange resources produced by the export of primary commodities.
- (c) The agricultural sector should have functioned in the period as a primitive market.
- (d) The Public Authorities should have manipulated the changes in the relative prices in order to raise resources to finance industrialization.
- (e) The State should have orientated the industrialization process toward preferential development of "durables", due to the pressures of aggregate demand.
- (f) Excessive effects of liberalization policies should have reduced the capacity of the domestic economy to adjust to international developments.

These hypotheses were considered as explanatory tools to the main general lines which characterized the process of industrialization in Brazil during the period 1940—1980. These general lines can be theoretically described in basically two periods: (a) a period of import-substitution, as the main line for industrialization (until 1964); (b) a period of "industrialization-cum-exports" growth, which was characteristic of post-1964 policies.

We think this distinction is important because it allows to understand the type of mixes adopted in the two different periods, as independent policies. This makes it also easier to understand the basic mechanism of both periods.

12.2. Main Differences Between the Two Periods

The main differences between the adopted policies by the Public Authorities in the two periods may be drawn along the following elements: (1) the function of the State as an economic policy-maker; (2) the function of the State as an economic agent (producer); (3) the role of imports; (4) the role of exports; (5) the role of monetary policies; (6) the role of fiscal policies; (7) the role of the State as an investor.

(1) The State as an economic policy-maker. - In the first period (import-substitution) the State extended its experience from coffee protective measures to an effective policy-making, which included the overall current set of growth policies. This role was continued in the second period (industrialization-cum-exports) while some differences may be listed in relation to particular policies.

A) Production in physical terms. In the first period, the State action was oriented to promote overall expansion of output, a policy which implied expansion of both durables and traditional consumption. This kind of option was possible due to the run in the domestic market for the creation of each type of industry. The country was coming from an extreme low position of income, and the overall industrialization promoted considerable the expansion of domestic disposable income. In the second period, the State became more orientated to the expansion of a selective group of manufacturing industries, especially the producers of "durables" and automotive equipment. This shifting was certainly determined by the growing scarcity of resources in exchange to finance overall growth, and also by the gradual process of income concentration generated by industrialization.

B) Analysis per Branch. An analysis per branch of the manufacturing expansion in the period, shows the following result (source: D.G.E., F.I.B.G.E. and F.G.V.).

Period: 1940-1980

Computed in 1949 real cruzeiros.

Specification:

Geometric Growth Rate (in percentage).

Brazil

Total Gross Capital Formation	9.4
Government Capital Formation	7.4
Private Sector - Capital Formation	9.9
Indirect taxes	8.4
Subsidies	13.3
Personal Consumption	6.9
Government Consumption	6.8
Urban Income	7.6
Agricultural Income	4.3
Total Savings	7.1
Net National Income	7.1
Disposable Income in the Private Sector	7.2
Manufacturing Industries	8.4
Services	7.1
Commerce	7.9
Transport & Communications	6.0
Labour Return	7.4
Mineral Extraction Industries	10.3
Industrial Services	9.5
Civil Construction	8.0

Specification:

Geometric Growth Rate (in percentage).

Brazil

Forestry	9.0
Non Metallic Industries	8.7
Metal Branches	10.5
Machines & Tools	8.9
Wood & Furniture	8.1
Paper & Similar	9.5
Rubber	11.6
Hides & Skins	5.2
Vegetal Oil	8.7
Chem & Pharmaceutical	10.1
Candles & Soaps	7.2
Dresses, Cloth & Similar	8.3
Textiles	5.8
Foodstuffs	7.1
Drinks	6.0
Tobacco	6.4
Edit & Printing	8.3

São Paulo State .

Manufacturing Sector	8.6
Metallurgy	8.7
Machines & Tools	9.7
Transport. Equipment	9.0
Wood	6.2
Furniture	7.3
Paper & Similar	8.4
Rubber	8.6
Hides & Skins	6.5
Chemical	11.6
Pharmaceutical	7.7
Candles, Soaps & Similar	10.3
Textiles	6.3
Shoes & Clothes	7.8
Foodstuffs	9.4
Drinks	3.8
Tobacco	4.9
Edit. & Printing	6.9
Mineral Extraction	4.3
Civil Construction	4.8

Specification:

Geometric Growth Rate (in percentage).

Rio de Janeiro State

Manufacturing Sector	6.1
Metallurgy	7.8
Machines & Tools	3.7
Electrical & Communication Equipment	6.9
Transport. Equipment	6.5
Wood	3.7
Furniture	4.5
Paper & Similar	3.9
Rubber	5.8
Hides & Skins	5.7
Chemical	9.4
Pharmaceutical	7.1
Candles, Soaps & Similar	7.6
Textiles	4.7
Shoes & Clothes	5.8
Foodstuffs	3.2
Drinks	5.1
Tobacco	5.2
Edit. & Printing	5.4
Mineral Extraction	13.1
Civil Construction	3.5

Bahia State

Manufacturing Sector	8.0
Metallurgy	8.4
Machines & Tools	9.2
Wood	4.8
Furniture	4.6
Rubber	10.9
Hides & Skins	5.0
Chemical	14.0
Pharmaceutical	3.2
Candles, Soaps & Similar	9.8
Textiles	7.5
Shoes & Clothes	5.0
Foodstuffs	7.4
Drinks	6.5
Tobacco	6.6
Edit. & Printing	5.7
Mineral Extraction	14.0
Civil Construction	4.7

Specification:

Geometric Growth Rate (in percentage).

Pernambuco State

Manufacturing Sector	5.4
Metallurgy	5.7
Machines & Tools	5.6
Wood	7.5
Furniture	4.3
Paper & Similar	9.3
Rubber	10.2
Hides & Skins	4.3
Chemical	5.8
Pharmaceutical	5.4
Candles, Soaps & Similar	6.4
Textiles	3.8
Shoes & Clothes	3.8
Foodstuffs	5.0
Drinks	3.8
Tobacco	9.9
Edit. & Printing	4.5
Mineral Extraction	10.0
Civil Construction	1.9
Transportation Equipment	13.1

Sergipe State

Manufacturing Sector	4.3
Wood	6.1
Furniture	4.1
Rubber	3.9
Hides & Skins	2.0
Pharmaceutical	5.0
Candles, Soaps & Similar	4.4
Textiles	6.6
Shoes & Clothes	3.3
Foodstuffs	5.1
Drinks	4.9
Tobacco	4.2

Rio Grande do Sul State

Manufacturing Sector	6.0
Metallurgy	7.3
Machines & Tools	8.8
Transportation Equipment	8.4
Wood	5.8

Specification:

Geometric Growth Rate (in percentage).

Rio Grande do Sul State

Furniture	5.3
Paper & Similar	5.9
Rubber	7.9
Hides & Skins	5.8
Chemical	10.2
Pharmaceutical	7.2
Candles, Soaps and Similar	8.6
Textiles	8.8
Shoes & Clothes	6.1
Foodstuffs	7.8
Drinks	7.4
Tobacco	6.9
Edit. & Printing	5.2
Civil Construction	4.3

This per branch table shows here some states which are part of the Brazilian Federation, aside from information at national level. We included some states in order to give an open picture of the effects of recent industrialization.

We will establish, as a criterium of the analysis, that rates of growth over 6 per cent are satisfactory, while those under this value may be considered as unsatisfactory. We found our hypothesis in the following observations: (a) the rate of industrialization, to be adequate, in a developing economy must be at least equal to 2-fold the demographic rate. This hypothesis is founded on the fact that the previous existing level of output was insufficient, and the expansion must cover both the population expansion and absorb the previous population outside the market. (b) once the rate in cruzeiros is a slice upward-oriented, when in comparison with a dollar index, then it is important to give a small margin of tolerance over the estimated adequate rate of growth.

C) Comments.

The previous implies that some states show a favourable course of industrialization, while others require additional amounts in the rate of growth. Although the process of industrialization has been present in all states of the Federation, the unequal endowment of factors, as well as effects of market shiftings, have been producing the situation of unfavourable industrialization mentioned above.

When looking at the information of item B), we found a favourable position in Brazil as an aggregate unity, while the same position is not available for all the states on the list. São Paulo, as the leading state into the process of industrialization, shows an excellent position. When observing Rio de Janeiro, the second industrial area in the country, the rate is also positive, while near our established frontier. It is possible both in São Paulo and Rio de Janeiro to

find some branches which are below the adequate value of the industrialization rate. Rates over 6 per cent may be interpreted not only as a strong local market for this branch but also that this state is an "exporter" of this output to other Brazilian states. When observing the rates of the heavy branches, we came to the conclusion that the country is in the period of study characterized by the expansion of heavy industries, and a relative slowdown of more traditional activities. States which were relatively industrialized in the beginning of this more rapid industrialization, as Rio Grande do Sul, Sergipe, Pernambuco, or even Rio de Janeiro, seems to have achieved less expressive rates than other areas as Mato Grosso do Sul, Minas Gerais or Paraná.

This situation can be misleading sometimes, since the average rate of industrialization of Piauí, the poorest Brazilian region, is higher (7.6) than the similar figure of Rio de Janeiro (6.1). The explanation is that a lower income level expands certainly quicker without producing for this higher accumulated capital or wealth. In other cases, the indication of the growth rate points to a real situation of relative stagnation, as in the case of Pernambuco and Sergipe. Thus, as a conclusion, we should come to the starting point of these considerations, i.e. additional investments are required to promote an acceleration of the growth rates of the regions unfavorably endowed by the process of industrialization. This effect would in fact require as a pre-condition, a change in the actual pattern, characterized by more rapid growth concentrated in a few regions.

While the goals of the Government action may be considered as achieved in the period of study, and thus the role of the State as a policy-maker is basically dexterous, the continuance of industrialization requires also an increasing sophistication. This need for sophistication is not, paradoxically, of technical nature, but of political nature. The visible gaps in the process of industrialization, as income concentration and excessive indebtedness, seems to be more the result of the abandonment of a public democratic life than the lack of sectoral models. Thus, the creation of democratic mechanisms to enliven the Public policy-making have become a decisive topic.

(2) The State as an Economic Agent. - Besides the conventional function of the State as a consumer and an employer, the Brazilian industrialization in the period of study introduced a new function to this economic agent, as a producer. Although this condition comprises both periods, the State as producer is a more typical actor in the post-1964 policies than before. This point has been viewed as an authoritarian result of industrialization (Fernando H. Cardoso, Octavio Ianni), and also as an unavoidable condition of late development and more rapid growth (Belluzzo, Estevam Martins, Luciano Coutinho, Paul Singer).

Paradoxically the role of the State as a producer was developed by those policy-makers who intended to reduce its position to a minimum. This may be interpreted as both: (a) the structural character of the disequilibria in the Brazilian process of growth (Furtado, Conceição Tavares, R. Corbisier); and (b) the failure of current orthodox theory to explain the specific character of the Brazilian process of growth (Oliveira Lima, Eimar Bacha, Eduardo Suplicy). Thus, the

expansion, especially in the second period, also comprehended business corporations, as well as trade companies, communications and transportation enterprises etc. The gradual expansion of the role of the State as an economic producer put in fact the Public Authorities on "the other side of the hill", once they have to act both as mediator in the market and as a profit-bearer. This position has thus been strongly criticized by the liberal current opinion. (Magrassi de Sá, Henry Maksoud, Helio Beltrão, E. Gudin, O. Bulhões).

Thus, while a considerable philosophical difference can be found between the policy-makers of both periods in relation to the role to be performed by the State as an economic agent, the practical effects of this have pointed in same direction: an expanded function of the State as a corporation owner and consequently a growing State-owned sector in the domestic economy.

(3) The Role of Imports. - In the first period, the importance of imports was in the expansion of urban demands, both as industrialization inputs and as an effect of urbanization. This role was considerably modified in the second period (industrialization-cum-exports). Continuous exchange devaluations enforced the adjustment of the domestic market by the developmental trend of the exports, reducing the expansion of expansion of local and traditional industries. Thus, the impact of the international events showed the weak points of the domestic process of industrialization, as well as emphasized them. The fact that the country was not a producer of its consumed technology, besides the growing imbalances in the Brazilian foreign trade, which were also stimulated by the devaluations, made the country depend heavily on resources gathered at international financing houses. This position evolved gradually to a reduction of the domestic capacity of decision, as well as to a strong economic depression (1981-1984).

(4) The Role of Exports. - In the first period (import-substitution industrialization), the exports were considered as a source of exchange resources, and as a decreasing source of these resources. Thus, policies were produced to reduce the cost of the export sector to a minimal exchange cost, while consequently the expansion of the exports was slowing down. Conversely, in the second period, the export sector was supported to grow, at the cost of raising import costs and reduced overall consumption, in relative expression. Thus, a consistent basic difference is also visible in the two periods, when in reference to the export policies, while both subordinated to the common purpose of financing industrialization.

(5) The Role of Monetary Policies. - In the first period, the monetary policies were basically manipulated to make the financial institutions reflect the changes in the Brazilian exchange reserves, as well as use these effects as sources of credit creation and substitutive industrialization. In the second period this orientation was changed, as to reflect the need for adjusting the domestic market by the developments abroad, and consequently stimulating exports, capital flows, internationalization and liberalization. Thus, in the second period (industrialization-cum-exports) the role of monetary policies was radically different than the previous one. An interesting element in this difference is that both sets of policy-makers used monetary policies to adjust the economy internally, while under

different goals and assumptions.

(6) The Role of Fiscal Policies. - A common trace of both periods is the relative low emphasis put on fiscal policies to gather the necessary resources for economic expansion. The cause for this attitude may be found in the traditionally low income levels of the country. Despite continuous economic growth, at least since the period before World War I, the country remains still at a low level of real income, when compared to MDC. The explanation for this is both: (a) the high demographic rate, which "consumes" a considerable part of the rates of growth and (b) the continuous outflow of capital, as a result of payments for services and capital services, as well as a result of higher rates of profit abroad. Due to these various circumstances, the Public Authorities have generally relied on the indirect taxes and correlated mechanisms, which are payed mostly by the people at lower income levels, but also without access to capital movements.

The fact that the monetary policies have not had the complement of an effective fiscal policy in the period of study may consistently explain the difficult position of the Government to promote more equal development in the country. This failure is thus characteristic of both periods, and represents an objective circumstance which in fact seems to have been understood by different types of policy-makers.

(7) The Role of the State as an Investor. - In both periods, the Government has performed as a direct and indirect investor. In the first period (import-substitution industrialization), the State was both an important credit creator and a direct investor, especially when in reference to large projects. This policy, while strongly criticized by post-1964 policy-makers, was paradoxically, followed and expanded by themselves. The State reduced in the second period, in relative terms, its expenditures within health service, education and other welfare items, while it extended its resources to overall expansion of road networks and mammoth-like projects, as hydroelectrical plants and mineral extracting export-complexes. Thus, the Government oriented the demand for productive consumption and constituted an increased source of the Private sector's expansion also in this period. At this point, mainly as an expression of the enforced liberalization policies, the domestic suppliers of heavy equipment and work suffered the competition from abroad.

In order to improve its position as an investor, the State's policy-makers tailored adequate mechanisms of Public savings to the State. The Government owned savings bankings, as well as the Government's securities market provided a part of the resources, demanded in domestic resources, to complete the fiscal sources. Additional constrained savings were produced through the already traditional mechanism of bank-money creation, as well as of devaluations and foreign borrowed resources. Also, in relation to the amount of savings, achieved both domestically and externally, the second period shows a more strong action of the State than in the first period (import-substitution). Conversely, the efficient use of resources seems to be more visible in the first period. Some extraneous unfavourable circumstances seem to have been connected with the less

efficient use of the available resources, as characteristic of the second period. The unfavourable capital costs development and lend-lease supplies, were a result from the mechanisms of devaluations, as effected by the relative exchange scarcity and fluctuations in imports. Besides, was the result of the fluctuations similar in the international trade, especially those affecting the price of Brazilian commodities; and finally, the effects produced by a domestic inadequate factors' use (as erroneous economic policies, inadequate allocations of investments, and weakness in sectors and/or branches produced by rapid growth, etc).

12.3. A Common Feature: The State Drive for Industrialization

Irrespective of the philosophy of the Brazilian policy-makers, an analysis of the Brazilian process of growth in the period 1940—1980 shows the persistent Government action for the industrialization of the country. The persistence of the Public action for industrialization may be interpreted as one or both of these considerations: (a) that the aim for industrialization is common to different forces within the Brazilian society; (b) that the need for industrialization is imposed to every political force, when commanding the Government action. Whichever the interpretation, the different Administrations commanding the country in the period of study not only expanded the State action as a policy-maker but also as an economic agent. This expansion, moreover, seems to have been determined by the requisitions of economic growth.

The above mentioned ideas imply to say that a considerable part of the acquired growth resulted from the State action, and consequently, it is difficult to realize how the country should have developed without this "driving force" for economic expansion.

An important explanatory reason for this permanent intervention of the State as the voucher of growth seems to be the lopsided character of the Brazilian natural and available resources (Mario Alves). Brazil has abundant iron, but scarce and poor coal, large amount of land, but extensive forests or excessively dry regions. Abundant human factor, but a reduced skilled manpower, etc. The resulting paradox of this situation, besides the fact that the country is a late-comer into the modern economic history, contributes to the need for persistent Public action, almost as immediately as the first action is produced to promote the output. In fact, as characterized by Alves, when including the State as the promoter of economic growth, the development not only becomes logical but also possible.

12.3.1. The State Action and the Perennial Cash Crop

In fact, as we mentioned before, the first circumstance which allowed the State to play a permanent function in the economy was the failure of the export system, which became total in the 1929 crisis. The Government intervention assured the action of Banco do Brasil (Caixa da Mobilização, CAMOB), a suitable price support to other agricultural output, while basically oriented to support the exportable crops.

As a result of this policy, a complete involvement into the mechanism of productive credit was unavoidable, and Banco do Brasil practically substituted the private banks in the function of supplying resources to expansion during the thirties. This strong involvement of the State made certainly cheaper the costs of the agricultural economy's failure in the thirties, and prepared the sudden re-allocation of the domestic financial structure to support manufacturing industries as soon as this was made evident. The gradual recovery of the export economy showed the adequate character of the implemented policy, a condition which is more surprising if we observe the consistent drive for industrialization that the Government Authorities promoted in the forties and in the fifties. Thus, the adoption of a policy of industrialization, while favouring the urban income creation, was not basically hostile to the export sector, and could allow it to expand the limits expressed by the international demand, as became evident in the early sixties.

Although we could suppose this policy as being characteristic of the first period under study (import-substitution industrialization), also in the second period, especially under the Geisel Administration (1975-76), the price of coffee was object of Public manipulation to produce more exchange resources for the country. Thus, a basic supposition may be established, in the sense that a more varied mix possibly strengthened the domestic capacity to expand, while one-sided reliance seems to reduce the domestic capacity to adapt and grow.

12.3.2. The State Action and the Expansion of the Infrastructure

An important point is constituted by the Public action in the expansion of the country's infrastructure. While in the time of Baron of Mauá (1840s) it was the Private sector which constituted the driving force of industrialization, in the recent period the State action practically undertook the domestic capacity for infrastructure works. As an example of this action, the domestic output of electric power increased 3.5-fold, when compared 1979 with 1967; of natural gas 1.7-fold, when compared 1980 with 1970; of raw oil 1.09 (1980/1970). Coal output was expanded 3.0-fold in the same period (1980/1970) and sea ship output 6.6-fold (1980/1970).

It is clear that this continuous expansion of the infrastructure implies a heavy cost for the population, especially those who are not beneficiaries of this improved economy. In fact, the major part of the civil society seems to disapprove to the big developmental projects, as promoted by the military-dominated regime. Despite this aspect, it seems also to exist a clear support in the civil society to growth projects, while oriented in a more normal pace, and according to another type of income distribution.

As we mentioned before, a comparison of the production trends, with the analysis of growth per sector, per branch and per Federation state, shows that the process of growth became considerably concentrated in the last period, and the main growth-projects which is the basis for this income concentration are not supported by the "everyday man". In fact, the achievements of high rates of industrial growth under the conditions of technological backwardness is only possible due to massive

technological borrowing of MDC, and in this case, as followed by the Brazilian Authorities, the price was excessive. Thus, the nature of the political power presently existing in Brazil, with its capital-bias drive for industrialization, seems to have made the costs for growth higher than aimed for in the majority of the society.

Although the cost for the expansion of infrastructure works has constituted a major part of the Brazilian cause for debt abroad, the domestic rate of gross savings, has constituted in the seventies a figure around 25 to 28 per cent of GDP, according to official information. Once the GDP in Brazil is larger than the GNP, this figure constitutes an amount which is not easily comparable with other developing countries. Thus, this high amount of savings had also to be inadequately employed to explain the average growth rates achieved in the period. The explanation of this low effect of the domestic savings, as we mentioned before, may be found in the excess of liberalization adopted in the second period (industrialization-cum-exports) under analysis. The cost for liberalization was higher than originally supposed, and the Government followed from devaluation to devaluation, in an attempt to assure the capital inflows necessary to maintain the functioning of the system. This policy has not only made the costs higher for capital and technology, but also set the domestic cost for labour under the degree of productivity already achieved, in comparative terms, by the country. This cheap labour in excess, is another important matter in the Brazilian recent growth.

12.3.3. The State Action and the Economic Costs of Rapid Growth to the Country

As is evident, especially under non-democratic leadership, the economic costs of the State-oriented industrialization drive have been high. An excessive indebtedness, especially in the period 1972 until today, has been used to avoid the development of the fiscal mechanism and to cover the normal and abnormal imbalances in the Brazilian foreign trade and in the country's capital account. In domestic terms this required also excess in liberalization policies, which reduced the responsiveness of domestic industries to developments abroad and depressed the gains of the labour factor. The continuous enforcement of these liberalization measures produced as a result an inadequate pattern of human costs as required by this process of growth. The rapid expansion of real disposable income seems to be followed by the reduced expansion in consumption of the working people. This carries as a consequence, that the superior strata in the market, consumes with high elasticities, while the major part of the potential market shows a consumption which is relatively stagnant.

The low income situation of the major part of the working people also contributes to an inadequate pattern of mass education, health, housing etc. with widespread ill-nutrition and inferior responsiveness to the requirements of more advanced economic growth. The adoption of more advanced technology foments massive unemployment and reduces the redistributive effects of economic growth in the economic structure.

Thus, the evolution of the country toward a democratic order should also

require the creation of institutional mechanisms which allow the civil society to participate at the decisional level of the State action for economic growth. The introduction of more advanced technology has to be combined with labour-intensive type of expansion, giving as a result a non-institutional type of cheap labour, which would certainly be more compatible with the mobility of the human resources.

Another negative point of the process of more rapid growth in the country is the inadequate use of the environment. This inadequate use has been characterized by a destruction of potential resources, due to prevalence of micro-criteria of the profits in many projects. The experience of MDC has showed since the sixties that a more complete view is necessary in order to avoid excessive costs to the society of inadequate use of the environment. Thus, the deterioration of the environment can be drastically accelerated by wrong decisions, as acceptance of techniques and equipment which had proved to be inadequate abroad, establishment of mammoth-like projects with high environment-polluting degrees, etc. In these cases, the demand for exchange resources, the primary source for the adoption of these less favourable projects, can in the future imply in a higher expenditure of exchange resources, to curtail the negative effects of the mentioned projects.

It is evident that the Public Authorities showed, in the sixties and the seventies, a low responsibility for the defence of the Brazilian environment. This was characterized by a Government advertising campaign, in the early seventies, labelled "Come to pollute here!", which provoked a criticism to the Brazilian position in different international conferences in the defense of the environment. During the seventies was also in Brazil collected abundant evidence on the negative effects of an inadequate use of the environment, especially on the situation of São Paulo area (Herval Ribeiro). This research has even constituted a basis for an international approach to the deterioration of the Brazilian environment, as caused by strategies adopted under the orientation of more rapid growth.

The long-run support of the more industrialized nations, especially credit facilities, benefits of trade and local production of relatively advanced equipment, should also be orientated to require from the Brazilian Authorities a more adequate preservation of the Brazilian environment, as a question being of general interest. An important example on the issue, is the decision for the gradual elimination of the Amazon Rainforest, and the establishment of cattle-raising in that region. Another example of inadequate decision is the ethanol-alcohol program (Proalcool), which was established in the middle seventies, in order to reduce the consumption of gasoline in Brazil. This program was based on the use of sugar cane. The decision was produced by a few policy-makers, who refused the other possible variant of the program. The other variant, which presented the production of alcohol from manioc root; included in the proposal was even a study of the the income redistribution effects that the adoption of manioc would imply. This was certainly the cause of the preference of the income concentrating alternative the one of sugar cane plantages, which benefitted a handful of high-incomed pro-

ducers.

12.3.4. The State Action and the Institutionalized Cheap Labour in Brazil

One of the vital points for the development of a democratic society is certainly the existence of a freely adjusted labour market. Once upon a time, a Brazilian President expressed that "the labour unions are a question of police, and not of policy". While such mentality is still persisting, it becomes difficult to adjust labour as a factor freely in a market interplay. The importance of the labour market acceptance lies also in the influence it has on the development of a domestic technology. When labour is persistently made cheap by institutional mechanisms; the labour fluctuations does not correspond to the cycle of capital goods (Koji Tahira), and consequently this phenomenon affects the process of development of human resources: The Brazilian Authorities in command of the labour component have not expressed officially any view on the issue. Wages have to be considered not only as a cost component, but also as an income component (C. Epitácio Maia). As an income component, the workers are to be considered as consumers and their participation in the consumption is important to the establishment of more balanced growth.

12.3.5. The State Action and Apparent Causal Factors of More Rapid Industrialization

Thus, as we extensively mentioned, the Government Authorities through all the period of reference of this study, showed in Brazil a consistent drive toward rapid expansion of industry. This was characterized by a high rate of investment in manufacturing activities, both as State owned or controlled pioneer activities, and as private established activities. The Government also expended in the period a considerable effort to make the credit mechanisms receptive to the private projects, as well as financed this credit through direct money issue, infrastructure facilities and cheaper exchange resources at disposition. This extensive action required, in different periods, the use of domestic and external savings. When the gains of the Brazilian foreign trade became reduced or even non-existent, the Government Authorities reduced the import composition which made the cost-of-living cheaper to the lower-incomed strata and applied the resources liberated in this manner in the expansion of preferential industrialization.

This preferential industrialization benefitted mostly the consumers of durables, as well as the producers, comprising generally these durables, the output of automobiles, trucks, tractors, TV sets, washing machines, air conditioners, etc. The domestic market was thus reorganized to correspond primarily to these demands, which became also preferential in the mechanism of credit to consumers.

A) Labour and Capital Shiftings.

The fact that this additional speeding up in the rates of growth was obtained at the expense of a restricted consumption of low-incomed strata, was not produced in absolute terms, as we showed in chapter 11. The restriction was prod-

used under the institutional low wage rates, a practical elimination of labour unions and labour guarantees in the market, while some gradual participation in the gains of increased productivity was allowed, especially during the last Administrations. This policy of wages squeeze revealed the concept, within the Government Authorities, of a necessary subservience of all other national goals to the major goal of rapid production growth in the preferential industries, and the apparently naive supposition that the expansion of durables will automatically along a new process of income redistribution.

Thus, as we argued in chapter 11, this process of income concentration is characterized by a higher level of GNP, and consequently higher levels of savings and acceleration of the rates of growth (M. Kalecki). Despite this recent move of the Public Authorities toward income concentration, a phenomenon which is aggravated by the extension of the Brazilian foreign debt, the policies which contributed to income concentration and more rapid growth were not exclusively founded in the second period of our analysis (industrialization-cum-exports). These policies can also be identified in the past, - in the first period of our analysis (import-substitution industrialization) and before.

It is important to have in mind that only a hundred years ago a considerable part of the Brazilian labour force was constituted by slaves and not considered to be human. This extremely low level of social organization can not disappear as sudden as the laws are enforced, and the hostile conditions for welfare remain acting deeply in the future. With this observation in mind, we see that Brazil has indeed progressed to a great extent in the period comprised by this study.

We already have pointed out that the preference for industrialization has presented some persistent biases. Thus, the rapid growth of production which benefitted the "durables" branches was paralleled by the lack of investments in agriculture, or at least excessive fluctuations in the pattern of an insufficient investment in agricultural activities. This policy contributed, through all the period under review, to a persistent low pattern of welfare in the rural areas. It is important to understand that this pattern was not created by the process of growth, but that it was already existing, due to the extremely unfavourable conditions of the earlier Brazilian colonization. It is also true that the omission and sometimes active participation of the Government Authorities against the poor strata in the rural areas has contributed to land speculation and consequently to land concentration. This pattern also reflects as a depression of the poor peasants' standard level, and even has pushed them into the condition of being landless labourers.

A positive effect which during a given historical period, occurring from this phenomenon, was the shift of labour from agriculture to non-agricultural sectors. This shift was also characteristically accompanied or preceded by the shift of capital from agriculture to urban activities, and the importance of rural activities in the economy decreased in a corresponding proportion. From a

certain moment, and onwards, a moment which roughly coincides with the forties, when the shift of labour and capital from agriculture into non-agricultural sectors was also induced by the effect of international fluctuations and the domestic policies of import-substitution and industrialization. We think that our use of the deposits function have characterized to some degree this mechanism, while in reference to the growing role of urban economy, and the collecting it produced of the large unused resources of the exportsector and of agricultural origin.

The speeding-up of labour and capital from agriculture to other activities was thus, the result of Government economic policies, while induced, and this certainly contributed to the sudden development of the heavy industries in the country and also of disposable income.

B) Cheaper Imports to the Urban Sector.

As we mentioned before, the import-substitution mixes of policies included as an important component the preferential urban consumption, since it implied both the manufactures demand for inputs as well as the direct consumption of the urban potential consumers of substitutive industrialization. Thus, if these consumers were allowed to consume cheaper imported commodities, a larger slice of their relatively low income should be disposable to consume more domestically produced substitutive commodities.

Thus, the cheaper import to urban consumption not only stimulated the expansion of the urban economy as exerted the function of a catalyst of the internal migrations toward urban activities and a higher standard of living. As a result of these changes, the rural standard-level became relatively depressed and the pattern of welfare in the rural areas certainly decreased. These changes also made the costs of credit or money higher to rural than urban areas, and as a consequence the rural population was oriented more to the production to the domestic market, or subsistence activities. At this point, it is possible to interpret the monopoly or quasi monopoly of the exchange, as a mechanism objectively used to depress the real income of the farms, while, due to the correlated inflationary mechanism, the agricultural prices were allowed to expand.

The reduced access to manpower and capital resources compelled, certainly, the landowners and the land speculators to drive forcibly away from land, the possession peasants and land labourers. This endowed these landowners both with the additional land to expand their bank credits, as well as to reduce the competition of peasants and created manpower to the landowners' properties. Thus, while the State in this period avoided a policy of land reform or land regulation, it performed a role in stabilizing the control of the rural areas, despite this income depression, in the hands of landowners and land speculators. This mechanism was not only characteristic of the first period of our study, but is also common in the second period (industrialization-cum-exports). This mechanism is also important to characterizing of the agricultural activities as a primitive market, and the process of concentration of rural income.

C) Urban Minimum Wages.

Another important component in the stimulation of more rapid industrialization was the establishment of a minimum wage to urban workers, during the first period of our periodization (import-substitution industrialization). The effect of this institutional measure, a State policy to accelerate the formation of a labour market, is in close association with the need of consumers, as characterized by condition B), previously described. In a situation where the major part of the available labour in the urban sector was unskilled, the establishment of a minimum wage produced in fact an elevation of the consumption level of the workers. This certainly contributed to the overall character of the process of industrialization and supported a domestic consumer goods industry which presented low quality and an excessive variety of goods. This newcomer in light industry was of course in need for persistent consumers, since the consumers of more larger income changed at every chance to use imports, if available. The urban minimum wages also played a role in reducing the differentials between domestic and foreign labour, once this external labour played an important role in the industries in the early period of industrialization.

D) The Borrowing on a Large Scale of Technology from Abroad.

Since Brazil is a country formed by immigration, the amount of funds transferred without any kind of accounting imputation is tremendous. When, as an example, a carpenter immigrant is moving to Brazil with his job experience, it immediately incorporates into the Brazilian economy this improvement in the productive capacity, without any cost than perhaps the cost of eventual remittances abroad of the part of the fruits of this man's work. This condition is more important as the more backwarded the economy is, and the importance of this aspect decreases as more complex the domestic process becomes of production. Brazil benefitted from the immigration of skilled labour up to the fifties, when this human "flow" became practically without economic significance. At this point, the importance of technology represented by imports of equipments and payed services of technicians had largely overcome the net effects of immigration. In this condition, the substitutive industrialization consumed considerable resources for paying domestic used know-how, as well as expanded continuously the imports of technology. The reason why, this inflow of technology was not interrupted is certainly the fact that the technological cost of the followers is cheaper than the cost for producing its own technology, as we previously mentioned.

It is interesting to note, that in both periods the Government action made efforts to assure a large flow of capital goods under subsidized costs. These

final cheap capital goods, especially if it was equipment, played an important role in the domestic process of capital formation. The concentration of the Public effort in the creation of infrastructure facilities conditioned favourably the rapid formation of a number of corporations, both with domestic and foreign resources.

The borrowing, on a large scale, of technology of the more industrialized countries was not paired by a compatible effort in the massive preparation of cadres capable of running a domestic technology. The reason for this seems to be the reduced investments in education of the Public Authorities, especially in the second period of our periodization (industrialization-cum-exports). The number and the quality of the educational establishments is not adequate to the process of changes undergone by the Brazilian economy. Studies on the high returns of education, which is mainly committed as an individual investment, show that the Public Authorities should have adopted a more expansive policy also for the human resources (C. Langoni, C. Moura e Castro).

The enlargement of the investments in education and research will certainly expand the effects of the imported technology, through the mechanism of diffusion. An important matter in relation to the expansion of technological capacity was certainly the fact that the Government Authorities in both periods established especially in the second one, protective measures to assure a market to the international corporations willing to produce plants in the Brazilian economic market. This was important to the expansion of domestic technological capacity. The directions in order to link the development of these corporations with the domestic market, in fact, excluded these corporations of the effects of international competition. This can have a less favourable effect to the adoption of more advanced technology on the part of these corporations, since they already have a consolidated position in the domestic market. The more interesting developments would thus consist in that also these giant corporations should be submitted to the same effects of the liberalization policies, in the aspect of competition from abroad.

12.4. Final Comment

Although the Brazilian Public Authorities in the last years have persistently denied a cyclical pattern in the Brazilian economy, boasting that the "bottleneck" was existing abroad, in the international market, yet, a long-run study of the Brazilian process of growth allow to identify the swings inherent to the Brazilian economy. The lack of an anticyclical policy of investments has certainly made the recent expansion of the Brazilian economy less smooth, although it proceeded without the appearance of insuperable difficulties.

Brazil, certainly because of its huge population and tremendous resources, is one of the few developing countries which managed to grow during the depressive trade conditions of the seventies. This has made the country the largest debtor in the Third World and certainly reduced its capacity to more rapid growth in the coming years. In the process of growth since World War II, the Brazilian State has performed a considerable part of the tasks which were supposedly in con-

cern of the Private Sector. This confirms both the "classical" character of the explanatory growth theory in the Brazilian case, as well as to support the current structuralist view that developing economies are particular cases, which ignore normative theories.

Due to the Public policies to promote a more rapid growth, the Brazilian economy probably accelerated its normal imbalances, resulting both in the excessive external indebtedness and the domestic disposable income concentration.

As a task to assure a more adequate development to this country in the near future, a gradual political change becomes necessary, with the adoption of a democratic order and domestic orientated expansive policies. The lasting result of the Brazilian process of industrialization is large enough and sound enough, to assure a better condition of living to the majority of the Brazilian population as well as assuring a gradual access of the country to the industrialized world.

A) OFFICIALS AND SEMI-OFFICIALS PUBLICATIONS.

- Anuário Estatístico do Brasil, IBGE, FIBGE, CNE, 1940-1983, several numbers.
 Boletim Estatístico, IBGE, FIBGE, Brazil (from 1943).
 Bolsa de Valores de São Paulo. Several Reports.
 Caixa de Amortização. (from 1933) Several Reports.
 Camara Sindical da Bolsa de Valores do Rio de Janeiro. Several Reports
 Comissão Executiva da Defesa da Borracha (from 1944). Several Reports.
 Comissão Executiva Textil (from 1943). Several Reports.
 Conjuntura Economica. FGV. Several issues.
 Conselho Nacional do Petroleo (from 1939). Several Reports.
 Contadoria Geral dos Transportes (from 1938). Several Reports.
 Departamento Economico do Banco Central. Several publications.
 Departamento Estadual de Estatística de São Paulo. Several Reports and publications.
 Departamento Nacional de Estradas de Ferro (from 1938). Several Reports.
 Departamento Nacional de Obras Contra as Secas - reports (from 1941).
 Direção do Serviço de Estatística da Produção - Reserved Reports - 1940 - 1947. Several numbers.
 Diretoria de Marinha Mercante (from 1938). Several Reports.
 Divisão de Aguas do Departamento Nacional de Produção Mineral (from 1938). Several Reports.
 Gabinete Técnico do Serviço Nacional de Recenseamento - reports (from 1940).
 Instituto Brasileiro do Café (from 1943). Several Reports.
 Instituto do Açúcar e do Alcool (from 1944). Several Reports.
 Relatorio Anual da Caixa Economica Federal, 1944-1979, several numbers.
 Relatorio da SUMOC (Brazilian superIntendency of money and credit, to-day national monetary council), 1947-1967. Several numbers.
 Relatorio do Banco do Brasil.- 1944-1977. Several numbers.
 Revista Brasileira de Economia. FGV. Several issues.
 Revista Visão. Especially reports: "Quem é quem na Economia Brasileira?" (from 1966). Several issues.
 Revista Brasileira de Estatística. Several issues, especially in the early 70s.
 Serviço de Estatística da Educação e Saude (from 1935). Several Reports.
 Serviço de Estatística da Produção - reports (from 1938). Several numbers.
 Serviço de Expansão do Trigo - (from 1943). Several Reports.
 Serviço de Estatística Economica e Financeira (from 1933). Periodic Reports.

- Sindicatos da Industria de Papel do Rio de Janeiro e do Estado de São Paulo.
(from 1944). Several Reports.
- Sinopse do Censo Agrícola - IBGE, FIBGE, 1940, 1950, 1960, 1970, 1980.
- Sinopse do Censo Demográfico - IBGE, FIBGE, 1940, 1950, 1960, 1970, 1980.
- Sinopse do Censo Industrial - IBGE, FIBGE, 1940, 1950, 1960, 1970, 1980.
- UN - ECLA, Estudio Economico de America Latina (several years).
- United Nations - (Annual Reports) Demographic Yearbook.
(Annual Reports) Statistical Yearbook.
(Annual Reports) World Economic Survey.
(Annual Reports) Yearbook of National Income Accounts.

B) LITTERATUR

- Albuquerque, Manoel M. de - Pequena Historia da Formação Social Brasileira, RJ, 1981.
- Alexander, Sidney S. - Effects of a Devaluation: A Simplified Synthesis of Elasticities and Absorption Approaches, A.E.R., 1959, vol. 49, pp. 22-42.
- Alexander, Sidney S. - Effects of a Devaluation on a Trade Balance, IMF Staff Papers, Apr. 1952.
- Almeida, Anna O. de - Distribuição de Renda e Emprego em Serviços; IPEA, 34, 1976.
- Almeida, Jose - Industrialização e Emprego no Brasil, IPEA, 1974.
- Alves, M. - A Crise Economica Atual, Sao Paulo, 1967.
- Alves, M. - Economia e Revolução, RJ, 1958.
- Ames E. and Rosenberg, N. - Changing Technological Leadership and Industrial Growth, The Economic Journal, vol. 73, 1963, pp. 18-etc.
- Aucrust, O. - 1970, PRIM I: A Model of the Price and Income Distribution Mechanism of a Open Economy, Review of Income and Wealth 16, pp. 51-78.
- Aukrust, O. - Inflation in the Open Economy: A Norwegian Model, in: L. B. Krause and W. S. Salant, eds. Worldwide Inflation (Brookings Institution, Washington, DC).
- Bacha, E. - Crescimento Economico Brasileiro Recente e Alguns de Seus Principais Problemas, RJ, 1974.
- Bacha, E. - Os Mitos de uma Década, RJ, 1976.
- Bacha, E. - O Rei da Belindia: Uma Fábula para Tecnocratas, U.B., 1974.
- Bacha, E. and Taylor, Lance - The Unequalizing Spiral: a First Growth Model for Belindia, in: Quartely Jornal of Economics, Q.J.E., 1976.
- Bacha, E. And Savit Claire - Os Novos Incentivos à Exportação e a Logica do Modelo Brasileiro, R.J., 1975.

- Bacha, E. - O Modelo Brasileiro, RJ, 1975
- Bacha, E., Mata, M. da and Modenesi, R. L. - Encargos Trabalhistas e Absorção de Mão de Obra: Uma Interpretação do Problema e seu Debate, IPEA/INPES, Relatório de Pesquisa no. 12, RJ, 1972.
- Baer, W., Kerstenetsky, I. and Villela, A.V. - The Changing Role of the State in the Brazilian Economy, World Development, vol. 1, 1973, no. 11, p.29.
- Baer, W. - The Brazilian Boom 1968-72: An Explanation and Interpretation, World Development, vol. 1, 1973, no. 8, pp. 1-etc.
- Baer, W. and Kerstenetsky, I. - The Brazilian Economy - in: R. Roett (Ed.), Brazil in the Sixties, Nashville, Tenn., 1972, pp. 105-etc.
- Baer, W. - Import Substitution and Industrialization in Latin America: Experiences and Interpretations, Latin America Research Review, vol. 7, 1972, no. 1, pp. 95-etc.
- Baer, W. and Hervé, M.E.A. - Employment and Industrialization in Developing Countries, The Quarterly Journal of Economics, vol. 80, 1966, pp. 88-etc.
- Bailby, Edouard - Brasil, País Chave do Terceiro Mundo, RJ, 1967.
- Bailey, R. - Sterling Balances, Midland Bank Review, May, 1964, London.
- Baklanoff, E. N. - External Factor in the Economic Development of Brazil's Heartland: The Center-South, 1850-1930, in: The Shaping of Modern Brazil, Baton Rouge, Louisiana, 1959, p. 26.
- Ball, R. J., Burns, T. and Laury, J.S.E. - The Role of Exchange Rates Changes of Payments Adjustment, The United Kingdom Case, Economic Journal 87, pp. 1-29, 1977.
- Bandeira, Moniz - O 24 de Agosto de Janio Quadros, RJ, 1961.
- Bandeira, Moniz - 1964-1974: Cartéis e Desnacionalização, RJ, 1979.
- Barbosa, Wilson - Problemas Metodológicos para o Estudo da Formação do Mercado Interno no Brasil, SP, 1966.
- Barbosa, Wilson - História do Brasil, SP, 1966.
- Barnet, R.J. and Muller, R. E. - Global Reach. The Power of the Multinational Corporations, New York, Simon and Shuster, 1974.
- Barsby, S. L. - Economic Backwardness and the Characteristics of Development, The Journal of Economic History, vol. 29, 1969, pp. 449-etc.
- Barsby, S. L. - Great Spurts and the Experience of Non-European countries, Journal of Economic Issues, vol. 7, 1973, pp. 459-etc.
- Batista Filho, O., Lima, H. Ferreira, Rodrigues, Martins & others - Capítulos da História da Indústria Brasileira, SP, 1959.
- Batra, R. N. - Studies in the Pure Theory of International Trade, London, Macmillan Press Limited, 1973.
- Batra, R. N. - International Corporations and Immiserization in Underdeveloped Countries: A General Equilibrium Analysis, Southern Methodist University, Dallas, Texas, mimeo.

- Batra, R. N. and Ramachandran, R. V. - Multinational Firms and the Theory of International Trade and Investment, *American Economic Review*, vol. 70, no. 3, June, 1980.
- Batra, R. N. and Seth, A. C. - Unemployment and the Theory of Tariffs, *Journal of International Economics*, vol. 7, no. 3, August, 1977.
- Beckerman, W. - The British Economy in 1975, C.U.P., 1965.
- Beers, John S. de - Some Aspects of Latin America's Trade and Balance of payments, *American Economic Association, A.E.R.*, vol. 39, 1949.
- Belluzzo, L. Gonzaga - Demanda Declinante, UNICAMP, 1977.
- Benevides, M. V. Mesquita - O Governo Kubistchek, *Desenvolvimento Economico e Estabilidade Política*, RJ, 1976.
- Bergsten, C. F., Horst, T. and Moran, T. H. - American Multinationals and American Interest, Washington, D. C., Brookings Institute, 1978.
- Bhagwati, J. N. - Distortions and Immiserizing Growth: a Generalization, *Review of Economic Studies*, vol. 35, no. 4, October, 1968.
- Bhagwati, J. N. and Brecher, R. A. - National Welfare in an Open Economy in the Presence of Foreign-owned Factors of Production, *Journal of International Economics*, vol. 10, no. 1, February, 1980.
- Bhagwati, J. N. and Tironi, E. - Tariff Changes, Foreign Capital and Immiserization, *Journal of Development Economics*, vol. 7, no. 1, March, 1980.
- Blejer, M. I. - The Short-run Dynamics of Prices and the Balance of Payments, *American Economic Review* 67, pp. 419-428, 1977.
- Board, National Industrial Conference - Obstacles and Incentives to Private Foreign Investments, N.Y., 1965.
- Boisier, Sérgio, Barros, Aluisio and others - Desenvolvimento Regional e Urbano: Diferenciais de Produtividade e Salários Industriais, IPEA, 15, 1971.
- Borges, P. Accioli - A Agricultura Brasileira nos Anos 40, I.C.S., Universidade do Brasil, RJ, 1960.
- Braga, R. Saturnino - Controlar as Importações e Mudar o Modelo, RJ, 1975, mimeo.
- Braga, R. Saturnino - Proposta para Mudança do Modelo Economico Brasileiro, M.D.B., RJ, 1976.
- Branco, Carlos Castello - Os Militares no Poder, RJ 1979.
- Branco, R. Castelo - Crescimento Acelerado e o Mercado de Trabalho: A Experiência Brasileira, EPG, FGV, RJ, 1979.
- Branson, W. - Stocks and Flows in International Monetary Policies, Fed. Res. Bank of Boston, 1974.
- Branson, W. and Myhrman, - Inflation in the Open Economies: Supply-determined versus demand-determined models, *European Economic Review* 7, pp. 15-34, 1976.
- Brecher, R. A. - Optimal Commercial Policy for a Minimum-wage Economy, *Journal of International Economics*, vol. 4, no. 2, May, 1974.

- Brehmer, E. - Controls on Capital Inflow, I.M.F., Staff Papers, pp. 427-438, vol. VIII, Dec., 1961, no. 3.
- Brito, F. and Merrick, T. - Migração, Absorção de Mão de Obra e Distribuição de Renda, in: Estudos Economicos, vol. IV, no. 1, Jan.-March, 1974.
- Brito, F. - A Mobilidade Ocupacional e Distribuição de Renda, Belo Horizonte, 1974.
- Brozen, Yale - Causes and Consequences of Inflation in Brazil, SP, Esp, mimeo. 1954.
- Bruno, M. - Price and Output Adjustment: Microfoundations and Aggregation, Journal of Monetary Economics 5, pp. 187-211, 1979.
- Bruno, M. - Import Prices and Stagflation in the Industrial Countries: A Cross-section Analysis, Economic Journal 90, pp. 479-491, 1980.
- Brunhes, J. - Geographie Humaine, Paris, 1958.
- Bulhões, O. G. de - Poupança e o Problema de Liquidez das Empresas, RJ, 1970.
- Burns, Arthur F. - Economic Research and the Keynesian Thinking of Our Times
- Cabral, R. and Lapa, R. - Desaparecidos Politicos, RJ, 1979.
- Caillaux, Elisa and Soares, Walmer, J. - A Politica Economica Governamental Dirigida às Pequenas e Medias Empresas, RJ, 1979.
- Calmfors, L. - Inflation in Swden, in: L.B. Crause and W. S. Salant, Eds., Worldwide Inflation, Brookings Institution, Washington, DC.
- Calmfors, L. and Herin, J. - Domestic and Foreign Price Influences. A Disaggregated Study of Sweden, in: A. Lindbeck, Ed., Inflation and Employment in Open Economies, North-holland, Amsterdam.
- Carvalho, Livio de - Principios e Aplicação de Politica Salarial pos-1964, Brasilia, 1973.
- Campos, R. de Oliveira - Problemas de Desenvolvimento da América Latina, speech at Interamerican Trade and Production Council, 1970.
- Candal, Arthur - Programa Estratégico de Desenvolvimento, Planning Federal Department.
- Cardoso, Fernando H. - As Ideias e Seu Lugar, RJ, 1980.
- Cardoso, Fernando H. - Perspectivas de Desenvolvimento e Meio Ambiente: O Caso do Brasil, vol. III, RCB, 1980
- Carvalho, Pereira,- Financiamento Externo e Crescimento Economico no Brasil: 1966-73, IPEA, 1975.
- Castro, Correa e - A Guerra e o Desequilibrio Economico, SP, 1949.
- Chang, T. - The International Comparison of Demand for Imports, The Review of Economic Studies, 1945-46, XIII.
- Chermann, Isaac - A Instrucao 113 da SUMOC, RJ, 1958.
- Chenery, Hollis B. - Patterns of Industrial Growth, The American Economic Review, (AER), Sept., 1960.

- Cobb, C.W. and Douglas, P.H. - A Theory of Production, American Economic Review, Proc. XVIII, 1928.
- Cooper, Richard N. - The Economics of Interdependence, USA, 1968.
- Corbisier, Roland - Capital Estrangeiro. ISEB, 1958.
- Corbisier, Roland - Operação Pan Americana, ISEB, RJ, 1959.
- Corbisier, Roland - Desajustes Estruturais, ISEB, 1960, mimeo.
- Corden, W.M. - Tariffs, Subsidies and the Terms of Trade, in: Economica, Aug., 1957.
- Costa, M. A. - Migrações Internas no Brasil, IPEA/INPES, Monografia no. 5, RJ, 1971.
- Coutinho, Luciano - O Setor Produtivo Estatal na Economia Brasileira, in: SEEB, SP, CEBRAP.
- Cross, R. and Laidler, D.E.W. - Inflation, Excess Demand and Expectations in Fixed Exchange Rate Economies: Some Preliminary Empirical Results, in: M. Parkin and G. Zis, Eds., Inflation in the World Economy, Manchester University Press, Manchester.
- Currie, D.A. - Some Criticisms of the Monetary Analysis of Balance of Payments Correction, Economic Journal 86, pp. 508-522, 1976.
- Dalano, R.T. - Brazilian Planning: Development Politics and Administration, Chapel Hill, N.C., 1967.
- Dailami, Mansour - Inflation, Dollar Depreciation and OPEC's Purchasing Power, in: Journal of Energy and Development, J. of E&D., Spring, 1979.
- Daly, H.E. - The Political Economy of Population, in: Rosentaum, Tyler Ed., Contemporary Brazil.
- de Carli, Gileno - J. Q., Brasília e a Grande Crise, RJ, 1961.
- Denison, F. - Why Growth Rates Differ, 1967.
- Dias, P. - A Revolução Burguesa, Porto Alegre, 1961.
- Domar, E. - Expansion and Employment, in: A.E.R., March, 1947.
- Domar, E. - The Problem of Capital Formation, in: A.E.R., Dec., 1948
- Dornbusch, R. - Devaluation, Money and Nontraded Goods, American Economic Review, pp. 871-880, 1973.
- Dorrance, Graeme S. - The Effect of Inflation on Economic Development, IMF, Staff Papers, vol X, no. 1. pp. 1-47, March 1963.
- Douglas, P.H. - The Theory of Wages, Macmillan, New York, 1934.
- Douglas, Paul - Controlling Depressions, W.W. Norton & Co., N.Y., 1935.
- Dowbor, Laçislas - Formação do Capitalismo Dependente 1977, Lisbon.
- Eckaus, R.S. - The Factor Proportions problem in Underdeveloped Areas, The American Economic Review, vol. 45, pp. 195-etc, 1965.
- Economic Research, National Bureau - The Role of the Computer in Economic and Social Research in Latin America, new York, C.N.P., 1974.

- Economou, G. - An Empirical Analysis of the Factors Determining Wages, Salaries and Prices in Greek Manufacturing Industry, Centre of Planning and Economic Research, Athens, 1975.
- Edgren, G.K., Flaxen, O. and Odher, C.E. - Wage Formation and the Economy, Allen and Unwin, London, 1973.
- Ellis, H.S. - The Economy of Brazil, Berkeley, U.C.P., 1969.
- Faber, M. and Seers, D. Eds., - The Crisis in Planning, London, 1972.
- Fajnzylber, F. - Sistema Industrial e Exportação de Manufaturados, IPEA-CEPAL, no. 7, 1971.
- Feira Industrial (report), - A Industrialização do Brasil, RJ, 1962.
- Fernandes, Florestan - Capitalismo Dependente e Classes Sociais na America Latina, RJ, 1973.
- Fichter, A. - O Regime Modernizador do Brasil, 1964-1972, RJ, FGV, 1974.
- Fishlow, A. - Brazilian Size Distribution of Income, The American Economic Review, vol. 62, pp. 391-etc, 1972.
- Fleming, J. M. and Boissoneault, Lorette - Money Supply and Imports, International Monetary Fund Staff Papers, vol. VII, May, 1961, no.2, pp. 227-240.
- Friedman, M. - A Monetary and Fiscal Framework for Economic Stability, in: A.E.R., June, 1948.
- Friedman, B. - Optimal Expectations and the Extreme Information Assumptions of "Rational Expectations" Macromodels, Journal of Monetary Economics 5, pp. 23-41, 1979.
- Furtado, Celso - A Economia Brasileira, RJ, 1954.
- Furtado, Celso - Uma Economia Dependente, RJ, 1956.
- Furtado, Celso - Perspectivas da Economia Brasileira, RJ, ISEB, 1958.
- Furtado, Celso - Formação Economica do Brasil, RJ, 1959.
- Furtado, Celso - A Operação Nordeste, RJ, 1960.
- Furtado, Celso - Desenvolvimento e Subdesenvolvimento, RJ, 1961.
- Furtado, Celso - A Pre-Revolução Brasileira, RJ, 1961.
- Furtado, Celso - Subdesenvolvimento e Estado Democrático. Recife, CDP, 1962.
- Furtado, Celso - Dialética do Desenvolvimento, RJ, 1964.
- Furtado, Celso - Subdesenvolvimento e Estagnação na America Latina, RJ, 1966.
- Furtado, Celso - Teoria e Política do Desenvolvimento Economico, SP, 1967.
- Furtado, Celso - Um Projeto para o Brasil, RJ, 1968.
- Furtado, Celso - Formação Economica da América Latina, RJ, 1969.
- Furtado, Celso - Analise do Modelo Brasileiro, RJ, 1972.
- Furtado, Celso - A Hegemonia dos Estados Unidos e o Subdesenvolvimento da America Latina, RJ, 1973.
- Furtado, Celso - O Mito do Desenvolvimento Economico, RJ, 1974
- Furtado, Celso - Prefacio a nova Economia Politica, RJ, 1976

- Furtado, Celso - Criatividade e Dependencia, RJ, 1978.
- Furtado, Celso - Brasil Pos-Milagre, RJ, 1981.
- Furtado, Celso - A Nova Dependencia, RJ, 1982.
- Galveas, Ernane - Brasil: Fronteira do Desenvolvimento, RJ, APEC, 1974.
- Gerschenkron, A - Economic Backwardness in Historical Perspective, H.U.P., 1962.
- Gerschenkron, A - Continuity in History and Others Essays, Cambridge, Mass., 1968.
- Goldstein, M. - The Effect of Exchange Rate Changes on Wages and Prices in the U. K.: An Empirical Study, I.M.F. Staff Papers XXI, pp. 694-739, 1974.
- Gordon, L. and Grommers, E.L. - United States Manufacturing Investment in Brazil: The Impact of Brazilian Government Policies, 1946-1960, Cambridge, Mass., 1962.
- Gordon, R. - Recent Developments in the Theory of Inflation and Unemployment, in: E. Lundberg Ed., Inflation Theory and Anti-inflation Policy, Macmillan, London, 1977.
- Graham, D.H. - Divergent and Convergent Regional Economic Growth and Internal Migration in Brazil, 1940-1960, Economic Development and Cultural Change, vol. 18, pp.362-etc, 1970.
- Grassman, S. - Exchange Reserves and the Financial Structure of Foreign Trade, 1973.
- Gudin, Eugenio.- Inflacao, RJ, 1959.
- Guimaraes, Alberto - Inflação e Monopolio Estatal no Brasil, ECB, RJ, 1963.
- Gunnarsson, C. - The Gold Coast Cocoa Industry, 1900-1939, Lund, 1978.
- Gustavo, I. - Planejamento Governamental: A Experiencia Brasileira, RJ, 1971.
- Haberler, G.- The Market for Foreign Exchange and the Stability of the Balance of Payments- in Kyklos, 1949, vol III, pp 201, etc.
- The Theory of International Trade, London, 1936.
 - Prosperity and Depression, Geneve, 1941.
- Hagen, S.E.- An Economic Justification of Protectionism, in Quartely Journal of Economics, 72, pp.496-514, 1958.
- Hahn, F.H. and Matthews, R.C.- The Theory of Economic Growth: a Survey, in Economic Journal, vol. 74, dec 1974.
- Harberger, A.C. - The Incidence of the Corporation Income Tax, in Journal of Political Economy, vol. 70, No. 3, June 1962.
- Currency Depreciation, Income and the Balance of Trade, in The Journal of Political Economy, vol 58, feb., 1950.
- Harris, J.R. and Todaro, M.P.- Migration, unemployment and Development: a Two-Sector Analysis, American Economic Review, vol. 60, No. 1, March 1970.
- Harrod, R.F.- Money, London, 1969.
- An Essay in Dynamic Theory, London, 1974.

- Haskins, C.P.- Empresas Multinacionais, RJ, 1972.
- Hinrichs, H. and Mahar, O.J.- Fiscal Change as National Policy: Anatomy of a Tax Reform, in Rosembaum & Tyler (Eds.), Contemporary Brazil, pp. 191, etc.
- Hirschman, A.O. - The Political Economy of Import-Substituting Industrialization in Latin America, The Quarterly Journal of Economics, vol. 82, 1968, pp. 1, etc.
- Hoffman, H.- Como Planejar Nosso Desenvolvimento?, RJ, 1963.
- Hoffman, R. and Duarte, J.C.- A Distribuição de Renda no Brasil, in Revista de Administração de Empresas, RAE, vol. 12, 1972, No. 12, pp. 46, etc.
- Horst, T.O.- The Theory of the Multinational Firm: Optimal Behavior Under Different Tariff and Tax Rates, in Journal of Political Economy, vol. 79, No. 5, Sept., 1971.
- J Hughes, K. - Factor Prices Capital Intensity and Technological Adaptation, in Contemporary Brazil: Issues in Economic and Political Development, ed. by W. Tyler, N. Y.
- Hymer, S.- The Efficiency (Contradictions) of Multinational Corporations, in American Economic Review, A.E.R., vol. 60, No. 2, May 1970
- Ianni, O.- Estado e Capitalismo, S.P., 1966.
Estado e Planejamento Economico no Brasil: 1930-1970, RJ, 1971.
- Iório, O.- Política Salarial no Brasil, RJ, 1970.
- Aspectos da Política Salarial Adotada no Brasil, APEC, 1971.
- Jansen, K.- Monetarism, Economic Crisis and the Third World, London, 1983.
- Jaspersen, F.Z. - Foreign Investment in Brazil, RJ, 1970.
- Johnson, H.G. - Monetary Theory and Policy, in American Economic Review, AER, vol. 52, june, 1962.
- The Monetary Approach to Balance of Payments Theory, in H.G. Johnson, ed., Further Essays in Monetary Economics, London, 1972.
- Inflation and the Monetarist Controversy, Amsterdam-London, 1972.
- Jones, R.W.- International Capital Movements and the Theory of Tariffs and Trade, in Quarterly Journal of Economics, Q.J.E., vol. 81, No. 1, feb., 1967.
- Jörberg, L.- Growth and Fluctuations of the Swedish Industry, 1869-1912, Lund, 1961.
- Structural Change and Economic Growth: Sweden in the 19th Century, in Economy and History , vol. VIII, 1965, pp. 3-46.
- Kalecki, M.- Essays in the Theory of Economic Fluctuations, London, 1939.
- Theory of Economic Dynamics, London, 1954.

- Poupança e Distribuição de Rendimento, RJ, 1952.
- Selected Essays on the Dynamics of the Capitalist Economy, London, 1971.
- Kanesathasan, S.- Export Instability and Contracyclical Fiscal Policy in Underdeveloped Export Economies, A Case Study of Ceylon Since 1948, in International Monetary Fund Staff Papers, vol. VII, No. 1, 1959.
- Kemp, M.C.- The Gain from International Trade and Investment. A Neo-Heckscher-Ohlin Approach, American Economic Review, AER, vol. 56, No. 4, sept., 1966.
- Kerstenetsky, I. and Villela, A.- As Modificações no Papel do Estado na Economia Brasileira, in Pesquisa e Planejamento Economico, vol. 3, No. 4, dec. 1973.
- Keynes, J.M.- General Theory of Employment, Interest and Money, London, 1936.
- Kindleberger, C.P.- American Business Abroad, New Haven and London, 1969.
- Koizumi, T. and Kopecky, K.J.- Foreign Direct Investment, Technology Transfer and Domestic Employment Effects, in Journal of International Economies, J.I.E., vol. 10, No. 1, feb., 1980.
- Kurz, M.- Arrow-Debreu Equilibrium of an Exchange Economy with Transaction Cost, in International Economic Review, IER, vol. 15, No. 3, oct 1983.
- Kuznets, S.- National Policy for Economic Welfare at Home and Abroad, N.Y., 1953.
 - Economic Growth and Income Inequality, in American Economic Review, AER, vol. 45, march, 1955, pp.1, etc.
 - Quantitative Aspects of Economic Growth of Nations: III, Distribution of Income by Size. Economic Development and Cultural Change, 11, jan, pp. 1, etc.
 - Long-Term Trend in Capital Formation Proportions, Economic Development and Cultural Change, vol. IX, no. 4, part II, 1961.
- Lafer, C.- O Sistema Político Brasileiro: Estrutura e Processo, SP, 1973.
- Laidler, D.E.W.- Price and Output Fluctuations in an Open Economy, in D.E.W. Laidler, ed., Essays on Money and Inflation, Manchester, 1975.
- Lamfalussy, A. - The United Kingdom and the Six, London, 1963.
- Lange, O.- Teoria da Reprodução e da Acumulação, RJ, 1962.
 - Introdução à Econometria, RJ, 1961.
- Langoni, C.G.- Distribuição de Renda e Desenvolvimento Economico do Brasil, Estudos Economicos, vol. 2, 1972, No. 5, pp. 5, etc.
 - As Causas do Crescimento Economico do Brasil, RJ, 1974.
 - A Economia da Transformação, RJ, 1976.
- Leontieff, V.V.- The Structure of American Economy: 1919-1939, N.Y., 1951.

- Leff, N.- Economic Policy-Making and Development in Brazil, 1947-1964, N.Y., 1968.
- Leventaskis, L.A. and Brissimiss, S. - Quartely Price and Wage Functions in the Greek Economy, 1973-1977 (English Resume), 1979.
- Lewis, W.A.- Unlimited Labour Supplies: Further Notes, Manchester School, vol. 26, 1958.
- Economic Development with Unlimited Supplies of Labour, Manchester School, vol.22, 1954, may, pp. 139-192.
 - Aspectos do Desenvolvimento Economico, RJ, 1966.
- Levinson, C.- Capital, Inflacao e Empresas Multinacionais, RJ, 1972.
- Lima, L.A. de Oliveira- Por Um Novo Modelo Economico, RJ, 1978. Mimeo.
- Perversões do Modelo Atual de Desenvolvimento, RJ, 1978, mimeo.
- Lindbeck, A.- The Nationalized State in an Internationalized World Economy, Institute for International Economic Studies, 1973.
- Stabilization Policies in Open Economics with Endogenous Politicians, in American Economic Review, May, 1976.
 - Imported and Structural Inflation and Aggregate Demand. The Scandinavian Model Reconstructed, in A. Lindbeck, ed., Inflation and Employment in Open Economies, Amsterdam, 1979.
- Lodder, C.- Distribuição de Renda nas Areas Metropolitanas , IPEA, 31, 1974.
- Loeb, G.F.- Industrialization and Balanced Growth: with Special Emphasis to Brazil, Amsterdam, 1957
- Lopes, F.L.- Inequality Planning in the Developing Economy, Harvard, 1972.
- Lucas Jr., R.E.- Some International Evidence on Output-Inflation Trade-offs, American Economic Review, AER, vol. 63, pp. 326-334, 1973.
- Lundahl, M.- Peasants and Poverty: A Study of Haiti, London, 1979.
- Lundberg, Erik- Svensk Finanspolitik: Teori och Pratik, 1971.
- Machlup, F. - Economica, vol. VI-VII, 1939-40.
- Machlup, F. - Liquidité Internationale et Nationale, Bulletin d'Information et de Documentation, Banque Nationale de Belgique, 37, pp. 105-116, feb, 1962.
- Maddison, Angus - Economic Progress and Policy in Developing Countries, London, 1958.
- Magalhães, S. Desenvolvimento Industrial, RJ, 1958.
- Magalhães, Fernando - El Perverso Milagre Economico Brasileiro. Santiago, 1971.
- Maizels, Alfred - Industrial Growth and World Trade, N.I.E.S.R., London, 1963, pp. 384-5 and 415-6.
- Malan, P.S., Ronelli, R., among others - Politica Economica Externa e Industrialização do Brasil, RJ, 1976.

- Maneschi, A. - The Brazilian Public Sector, in Roett Ed., Brazil in the Sixties, pp. 185-etc.
- Marini, Rui Mauro - Dialética do Capitalismo, SP, 1965.
- Dialética do Subdesenvolvimento, 1967.
- Marx, K. Capital, vol. 1, N.Y., I.P., 1967.
- Matta, Milton, da - Concentração de Renda, Desemprego e Pobreza no Brasil, IPEA, 41, 1979.
- McCallum, B. T. - Rational Expectations and the Natural Rate Hypothesis: Some Evidence for the United Kingdom, Manchester School of Economic and Social Studies, 43, pp. 56-67, 1975.
- Rational Expectations and the Natural Rate Hypothesis: Some Consistent Estimates, Econometrica, 44, pp. 43-52, 1976.
- Meier, G. M. - Export Substitution and Multinational Enterprises, in: Employment, Income Distribution and Development Strategy, Problems of Developing Countries, Ed. by A. Carvineuos and M. Puri, Essays in Honor of H.W. Singer, London, 1976.
- Mello, Jaime Portela de - A Revolução e o Governo Costa e Silva, RJ, 1979.
- Mello, Joao M. Cardoso de - A Crise de Realização da Produção, in: SEEB, Por uma Crítica Teórica da Estatização, CEBRAP, mimeo., SP, 1977.
- Mitchell, W. - Business Cycles and their Causes, U. Cal. Press, Berkeley, 1913.
- Moraes, Mascarenhas de - A Campanha da F.E.B. na Itália, B.E.B., RJ, 1954.
- Morgner, Aurelius - Implicações Sociais e Economicas da Atual Inflação no Brasil, in: Sociologia, vol XXI, no.2, 1959.
- Morley, S.A. - Inflation and Stagnation in Brazil, Economic Development and Cultural Change, vol. 19, 1971, pp. 184-etc.
- Mullineaux, A.W. and Thompson, J.L. - Rational Expectations and Monetary Stabilisation Policy: A Survey, British Review of Economic Issues, 1982.
- Mundell, A. - The Appropriate Use of Monetary and Fiscal Policy for Internal and External Stability, in: International Monetary Fund, Staff Papers, vol. IX, March, 1962, no. 1.
- Munhoz, Dercio G. - Evolução da Conjuntura, Un. Brasilia, 1975, mimeo.
- Myhrman, J. - The Determinants of Inflation and Economic Activity in Sweden, in: A. Lindbeck Ed., Inflation and Empliment in Open Economies, North-Holland, Amsterdam, 1979.
- Narvekar, P.R. - The Cycle in Japan's Balance of Payments, 1955-58, I.M.F. Staff Papers, vol. VIII, Dez. 1961, no.3, pp. 380-411.
- Netto, A. Delfim - Alguns Problemas do Planejamento para o Desenvolvimento, SP, FCEPA-USP, 1962.
- Analise do Comportamento Recente da Economia Brasileira, mimeo., SP, 1967.

- Netto, Amorim - Não Revitalizar a Liquidez, June, 1976.
- Netto, Carneiro - Política Econômica dos Inícios dos Anos Setenta, PUC, RJ, 1977.
- Netto, D., Pastore, A., Carvalho, E. and others - Alguns Aspectos da Inflação Brasileira, SP, Estudos ANPES, no.1, 1965.
- Netto, Dionísio - A Política Econômica do Governo nos Meados dos Anos Setenta, RJ, 1977, mimeo.
- Netto, J. Pinheiro - A Reforma Agrária é Necessária, RJ, 1961.
- Newfarmer, R.S. - O Takeover das Transnacionais no Brasil e o Controle sobre o Mercado, in: Pesquisa e Planejamento Econômico, vol.8, no. 3, ec, 1978.
- Normano, J.F. - O Desenvolvimento Industrial do Brasil, Digesto Econômico, March, 1951, SP.
- O'Briem, F.S. and Salm, C.L. - Desemprego e Subemprego no Brasil, Revista Brasileira de Economia, vol. 24, no. 4, pp. 110-etc, 1970.
- Ohlsson, R. - Ekonomisk Strukturförändring och Invandring, Lund, 1978.
- Okun, A. - Potential GNP: Its Measurement and Significance, 1962.
- Oliveira, Francisco de - O Estado nas Economias Dependentes, In: SEEB, CEBRAP SP, 1977.
- Oliveira, J. Kubistchek - A Marcha do Amanhecer, SP, 1962.
- Onody, Oliver - A Inflação Brasileira, 1820-1958, RJ, 1960.
- Ormerod, P. - Manufactured Export Prices in the United Kingdom and the "law of one price", Manchester School of Economic and Social Studies, 48, pp. 265-283, 1980.
- Paiva, Ruy and others - O Setor Agrícola do Brasil: Comportamento Econômico, Problemas e Possibilidades, SP, 1973.
- Parkin, M. - Inflation, the Balance of Payments, Domestic Credit, Expansion and Exchange Rate Adjustment, in: R. Z. Aliber Ed., National Monetary Policies and the International Financial System, University of Chicago Press, Chicago, IL, 1974.
- Parkin, M. and Swoboda, A. K. - Inflation: A review of Issues, in: E. Lundberg, Ed., Inflation Theory and Anti-Inflation Policy, Macmillan, London, 1977.
- Passarinho, Jarbas - Mercado de Trabalho e Salários, MT, RJ, 1968.
- Pastore, Afonso G. - A Oferta de Moeda no Brasil, in: Pesquisa e Planejamento Econômico, vol. 3, Dec., 1973.
- Aspectos da Política Monetária Recente no Brasil, in: Estudos Econômicos, vol.3, 1973.
- Pastore, J. and Bianchi, A. Maria - A Determinação de Salários: Uso de um Modelo Causal, RJ, 1972.

- Pastore, J. - Agricultura e Desenvolvimento, RJ, 1974.
- Pazos, F. - Inflation and Exchange Instability in Latin America, I.M.F., A.E.R., 1949.
- Peixoto, Joao B. - BEx, RJ, 1975.
- Pereira, Silva - O Projeto Jurídico de 31 de Marco, SP. 1967.
- Perlo, Victor - A Ofensiva dos Monopólios, RJ, 1972
- Picooli, Ivo C. - Pressões na Renúncia do Janio, SP, 1961.
- Pignaton, A.A.G. - Capital Estrangeiro e Expansão Industrial no Brasil, Departamento de Economia, Universidade de Brasília, Brasília, Sept., 1973.
- Pinheiro Netto, J. - Salário é Causa da Inflação?, RJ, 1963.
- Pinto, Anibal - Ni Estabilidad ni Desarrollo: La Política del Fondo Monetário, Santiago, 1960, Chile.
- Pinto, M. Silva - O Controle do Comércio Externo e o Desenvolvimento Econômico do Brasil, 1972.
- Prado Jr. Caio - A Revolução Brasileira, SP, 1966.
- Prebisch, Raul - Economic Development or Monetary Stability: the False Dilemma, in: Economic Bolletim for Latin America, 6, March, 1961.
- The Economic Development of Latin America and its Principal Problems, in: E.B.F.L.A., 7, Feb., 1962.
- A Dinamica do Desenvolvimento Latino-Americano, RJ, 1964.
- Primo, Alésio V. - O Problema da Capitalização Rural, Departamento de Crédito Rural, Banco do Brasil, 1982.
- Rangel, I. - A Inflação Brasileira, RJ, 1963.
- Rao, D.C. - Urban Target Groups, in: Redistribution with Growth, Joint Study of World Bank and I.D.B. at the University of Sussex, O.U.P., 2nd. print, 1975.
- Raouf, Kahil - Inflation and Economic Development in Brazil, 1946-1963, Oxford, C.P., 1973.
- Resende, F., Netto, C. and others - Aspectos da Participação do Governo na Economia, 26, IPEA, 1976
- Ritter, Lawrence - Money and Economic Activity, Boston, 1952.
- Robalinho, Frederico - Redução de Crédito às Pequenas e Médias Empresas, CEBRAE, 1977.
- Robinson, Joan - Essays in the Theory of Employment, London, 1937.
- Roegen, N.G. - Structural Inflation-Lock and Balanced Growth, mimeo.
- Rolemberg, N. - Neglected Dimensions in the Analysis of Economic Change, B.O.O.E.S., Feb., 1964.
- Rooth, Ivar - Devalveringen och den Ekonomiska Politiken, Lund, 1949.
- Rostow, W.W. - The Process of Economic Growth, N.Y., 1952.

- Sahota, G. - An Economic Analysis of Internal Migration in Brazil, in The Journal of Political Economy, vol. 76, 1968, pp. 218, etc.
- Brazilian Economic Policy: An Optimal Control Theory Analysis, N.Y., 1975.
- Salmen, L.F.- Urbanization and Development, in H.J. Rosenbaum and W.G. Tyler (eds.) Contemporary Brazil: Issues in Economic and Political Development, N.Y., 1972, pp. 415, etc.
- Santos, Wanderlei G.- Quem dará o golpe no Brasil ?, RJ, 1961.
- Introdução ao Estudo das Contradições Sociais, RJ, 1963.
- Sarantis, N.C.- The Effects of Domestic and Foreign Impulses on Economic Activity in Greece, London, 1973.
- Sargent, T. J.- Rational Expectations, the Real Rate of Interest and the Natural Rate of Unemployment, Brookings Papers on Economic Activity 2, 429-472, 1973.
- Savosnik, K.M.- National Income, Exchange Rates and the Balance of Trade, Economica, May 1958, pp. 188-195.
- Sayad, Joao- Real State Investments and Financial Markets, in Brazilian Economic Studies, No 4, 1978.
- Schlittler, H.S.- Comércio Exterior do Brasil e Desenvolvimento Economico, in Revista Brasileira de Ciencias Sociais, Belo Horizonte (BH), II-1, 1962.
- Indices de Preços no Comercio Exterior do Brasil, in Revista Brasileira de Economia, ano 6, no. 2, 1952, RJ, pp.- 71-103.
- Serra, J.- El Milagre Brasileño, Santiago de Chile, 1972.
- Shinohara, M.- Relative Production Levels of Industrial Countries and their Growth Potentials, Weltwirtschaftliches Archiv, Band 86, Heft 1, 1961.
- Structural Changes in Japanese Economic Development, Tokyo, 1970.
- Silber, S.- Análise da Política Economica e do Comportamento da Economia Brasileira: 1929-1939, RJ, 1973.
- Silva, Jáiner G. Pinheiro da- A Crise de 1929 no Brasil, RJ, 1961.
- Silva, Maria da Conceição - Public Finance, in APEC, RJ, june, 1980.
- Silva, S. - A Acumulação na Agricultura Brasileira, SP, 1975.
- Simonsen, M.H.- Brasil 2002, RJ, 1972.
- Brazilian Inflation: Postwar Experience and Outcome of the 1964 Reforms, in Committee for Economic Development (Ed.), Economic Development Issues: Latin America, N.Y., 1967, pp. 265- etc.
- Simonsen, M.H. and Campos, R. - A Nova Economia Brasileira, RJ, 1974.
- Singer, P. I. - Ciclos de Conjuntura em Economias Subdesenvolvidas, in Revista da Civilização Brasileira, No. 2, 1965.

- O Desenvolvimento Economico e a Evolução Urbana, SP, 1968.
- O Milagre Brasileiro: Causas e Consequencias, CEBRAP, 1973.
- Crise, Só do Milagre, 1976, May, SP.
- Smith, G.W.- Price Determination, in M. Sarkin and M. Summer (Eds.), Inflation in the United Kingdom, Manchester, 1978.
- Sodré, N. Werneck- Formação Histórica do Brasil, 1961.
 - Historia da Burguesia Brasileira, 1964.
 - Brasil, Radiografia de um Modelo, RJ, 1977.
- Solow, R.- Capital Theory and the Rate of Return, Amsterdam, 1963.
 - Price Expectations and the Behavior of the Price Level, Manchester, 1969.
- Sousa, A. de Mello e - Efeitos Economicos do Salario Minimo, APEC, RJ, 1971.
- Stepan, A.- Brasil, los Militares y la Politica, Buenos Aires (BA), 1974.
- Streeten, P. - The Coefficient of Ignorance, Bolletín of Oxford, I.E.S., 1963.
- Suplicy, E.- Problemas Estruturais da Economia Brasileira Atual, RJ, 1976.
 - Inflação e Desequilíbrio no Balanço de Pagamentos, RJ, 1977.
- Suzigan, W., and others, Crescimento Industrial no Brasil, IPEA, 26, RJ, 1974.
- Suzigan, W.- A industrialização ..., in, Pesquisa e Planejamento Economico, 5, no. 2, dec. 1975.
- Sweezy, P.- Teoria do Desenvolvimento Capitalista, RJ, 1962.
- Söderström, H.T. and Viotti, S. - Money Wage Disturbances and the Endogeneity of the Public Sector in an Open Economy, in A. Lindbeck (ed.), Inflation and Employment in Open Economies, Amsterdam, 1979.
- Tavares, Maria da Conceição- Acumulação de Capital e Industrialização no Brasil, RJ, 1974.
 - Auge y Declinación del Proceso de Substitución de Importaciones en Brasil, Boletín Economico de America Latina, 9, I, march, 1964.
 - Natureza e Contradições do Desenvolvimento Financeiro Recente no Brasil, RJ, 1971.
 - Da Substituição de Importações ao Capitalismo Financeiro, RJ, 1972.
 - A Substituição de Importações e a Industrialização Brasileira, RJ, 1963.
 - Distribuição de Renda, Acumulação e Padrões de Acumulação: um Ensaio Preliminar, RJ, 1975.
- Tavares, M. da C. and Serra, J. - Más Allá del Estancamiento, ELAE, Santiago de Chile, 1971.

- Tendler, J.- *Electric Power in Brazil : Entrepreneurship in the Public Sector*, Mass., 1968.
- Thompson, R. L., - *The Metaproduction Function for Brazilian Agriculture: a Analysis of Productivity and other Aspects of Agricultural Growth*, Purdue, 1974.
- Tolosa, H.- *Dualismo no Mercado de Trabalho Urbano*, in *Pesquisa e Planejamento Economico*, 5, June, 1975.
- Triffin, R.- *The Relationship Between International Monetary and Regional Systems*, in *A Global Agenda for the Eighties*, Khadija Haq (Ed.), Washington, 1981.
- Turnovsky, S.- *The Dynamics of Fiscal Policy in an Open Economy*, in *Journal of International Economics*, JIE, feb. 1976.
- Tyler, W.C.- *Labour Absorption with Import Substituting Industrialization: a Examination of Elasticities of Substitution in the Brazilian Manufacturing Sector*, *Oxford Economic Papers*, OEP, No. 5, vol. 26, 1974, pp. 93-etc.
- Valle, A.- *Novas Estruturas Política Brasileiras*, RJ, 1977.
- Vernon, R.- *Storm Over the Multinationals: the Real Issues*, Mass., 1977.
- Villela, A.- and Baer, W.- *O Setor Privado Nacional: Problemas e Politicas Para o Seu Fortalecimento*, CRP, 46, IPEA, 1980.
- Villela, A.- *As Empresas do Governo Federal e Sua Importancia na Economia Nacional, 1959-1960*, in *Revista Brasileira de Economia*, vol. 16, 1962, No. 1, pp. 97-etc.
- Vianna, P.R.- *Análise da Política de Crescimento do Governo*, RJ, 1977.
- Vitor, Mario- *Cinco Anos Que Abalaram o Brasil*, RJ, 1965.
- Von Doellinger, C. and others - *Transformação da Estrutura das Exportações Brasileiras, 1964-1970*, CRP, 14, IPEA, 1973.
- *A Política Brasileira do Comercio Exterior e seus Efeitos, 1967-1973*, CRP, 22, IPEA-INPES, RJ, 1974.
- Wai, U.T.- *Interest Rates Outside the Organized Money Markets*, IMF Staff Papers, vol. 6, No. 1, Nov. 1958.
- Weffort, Francisco- *Participação e Conflito Industrial: Contagem e Osasco*, 1968, CEBRAP, 5, 1972.
- Werneck, Dorothea F. F. - *Emprego e Salarios na Industria de Construção*, 40, IPEA, 1978.
- Whitman, M.V.- *Global Monetarism and the Monetary Approach to the Balance of Payments*, Brookings Papers on Economic Activity, 1975.
- Wogart, J.P.- *Mobilizing Resources for Economic Growth: From Inflation to Tax and Debt-Asset Financing*, in *Rosembaum & Tyler (Eds.), Contemporary Brazil*, op. cit, pp. 167-etc.

- Youngson, A.J.- Overhead Capital, Edinburgh, 1967.
- Yuize, Yasuhiko - Crescimento da Renda e Consumo. O Caso de Algumas Prefeituras do Japão, RJ, 1963.
- Yule, G.V. and Kendall, M.G. - An Introduction to the Theory of Statistics, London, 1945.
- Zawadzki, K.K. - The Economics of Inflationary Processes, London, 1965.
- Zellner, A. - (Ed.)- Studies in Bayesian Econometrics and Statistics, Amsterdam, 1975.
- Zeuthen, F.- Economic Theory and Method, London, 1957.
- Zottmann, Luis - Inflação, Formação de Poupança e Criação de Emprego, RJ, 1970.

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